











August 5, 2016

Submitted via www.regulations.gov

Re: EPA Docket ID No. EPA-HQ-OAR-2015-0531

Protection of Visibility: Amendments to Requirements for State Plans; Proposed

Rule, 81 Fed. Reg. 26,942 (May 4, 2016)

Comments of Earthjustice, National Parks Conservation Association, Sierra Club,

Appalachian Mountain Club, Environmental Law & Policy Center, Northwest

Environmental Defense Center, and Physicians for Social Responsibility

Earthjustice, National Parks Conservation Association, Sierra Club, Appalachian Mountain Club, Environmental Law & Policy Center, Northwest Environmental Defense Center, and Physicians for Social Responsibility submit the following comments on the proposed amendments to the Regional Haze Rule, 81 Fed. Reg. 26,942 (May 4, 2016). States and EPA secured important reductions in visibility impairing pollutants through regional haze plans for the first planning period. Once these plans are fully implemented, every Class I area will realize clearer skies, and park visitors and local communities will experience healthier air.

However invaluable these gains, every Class I area continues to suffer from visibility impairment, as no Class I area has achieved the statutory mandate of natural visibility conditions. As a result, the continued significance of the Regional Haze Rule to realizing the statutory goal cannot be overstated.

In the amendments to the Regional Haze Rule, EPA has proposed revisions to clarify its long-standing interpretation of the rule. These amendments include specifying that *all* states are responsible for implementing measures to achieve reasonable progress, and providing that the pollutant reductions to achieve reasonable progress define the reasonable progress goal.

If finalized, the amendments will also strengthen the role of the Federal Land Managers ("FLMs") by better integrating their expertise and drawing on it earlier in the planning process. In particular, the revised section on reasonably attributable visibility impairment ("RAVI") properly relies on FLM knowledge of the resources they manage and sources that affect them, while retaining state responsibility to address sources identified by the FLMs. EPA should retain the requirement that a state respond to a RAVI certification within three years of the certification.

Critically, the modifications to the Regional Haze Rule will also better protect Class I areas farthest away from achieving natural conditions by requiring states contributing to their impairment to demonstrate that there are "no additional measures" available for making greater progress. The amendments also make clear EPA's longstanding interpretation that the uniform rate of progress is not a safe harbor; if emission reductions are achievable to make progress that would bring about natural conditions more expeditiously than the 2064 goal, so must a state require such reductions to be true to the statute.

While these elements of the proposal would strengthen the rule, other proposed provisions would frustrate achievement of the Clean Air Act's visibility goals. The following three proposals would be the most damaging: extending the deadline to 2021 for states to submit the next round of plans; repealing the requirement to submit progress reports as state implementation plan ("SIP") revisions; and allowing progress to be measured against 2000-2004 air quality conditions. These proposals would, respectively, further delay reductions in visibility impairing pollution, remove a process for ensuring that states actually implement measures in their plans and take mid-course corrective actions as necessary, and allow backsliding in future planning periods by measuring progress against an outdated baseline. We urge EPA not to finalize these three proposals.

We commend EPA for proposing a new tracking metric for addressing challenges related to wildfire, and recognize the difficulties in addressing this issue. However, defining human-caused wildfire as entirely natural is a recipe for permitting pollution that otherwise could be limited. Fire prevention is not at odds with careful and planned use of prescribed burns to promote healthy ecosystems and long-term air quality, which we support. To this end, we urge the agency to ensure that states and Federal Land Managers assess and plan for minimizing human-caused wildfires.

Finally, we recommend below that EPA provide greater detail for specific elements of the proposal. Our recommendations in this vein seek to ensure consistency between the rule and the statute by making clear that: (1) the sections related to new sources of pollution compel all new sources of haze pollution to be accounted for and their impacts be effectively mitigated; and (2) any analysis of emitting sources must ultimately result in actual emission reductions that will remedy visibility impairment.

I. SUMMARY OF RECOMMENDED REGULATORY CHANGES

Note: additions are marked in bold; deletions are marked by strikethrough

Section of 40	Recommended Language
C.F.R	
51.301	Anthropogenic means resulting, directly or indirectly, from human
	activities.
	Natural means not resulting, directly or indirectly, from human
	activities.
	Wildfire A wildfire that predominantly occurs on wildland is a natural
	event.
51.302(a), (b)	"small group number of sources"
51.302(d)	Option 1
51.307(c)	Review of any major stationary source or major modification under
	paragraph (a) or (b) of this section shall be conducted
51.308(f)(1)(vi)(B)	As part of an implementation plan revision, and provided that the
	state first conducts the analysis required under section (f)(2)(i), tThe
	State may submit a request to the Administrator from (1)
	anthropogenic sources outside the United States, provided that the
	State's demonstration shows that the State would achieve the uniform
	rate of progress but for manmade emissions emanating from outside
	the United States and/or (2) during which appropriate basic smoke
	management practices were applied, provided that the State has
	analyzed and required controls for these sources according to the four
	factors in paragraph (f)(2)(i) of this section If the Administrator
	determines that the state has satisfied the requirements of section
	(f)(2)(i), and has estimated the impacts from anthropogenic sources
	outside the United States or wildland prescribed fires using scientifically
	valid data and methods, the Administrator may approve the proposed
	adjustment to the uniform rate of progress for use in the State's
	implementation plan. The adjustment may be no greater than is
	justified by the specific international contributions quantified by the
	state using scientifically valid data and methods approved by the
	Administrator.
51.308(f)(2)	(2) Long-term strategy for regional haze and reasonably attributable
21.300(1)(2)	visibility impairment. Each State must submit a long-term strategy that
	addresses, prevents , and remedies regional haze visibility impairment
	The long-term strategy must take into account the effect of new sources
	(including major sources, minor sources, area sources, mobile sources,
	and other sources of haze-causing emissions) and include the

	enforceable emission limitations All emissions limitations and other enforceable measures must be installed and operated as expeditiously as practicable, even if they cannot be installed and operated by the end of the planning period
	(i) The State must consider, and analyze, and require emission reduction measures based on the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected major or minor stationary source or group of sources
	(ii) The State must consider the uniform rate of improvement in visibility, the emission reduction measures identified in $(f)(2)(i)$, and additional measures being adopted by identified in other contributing states in $(f)(2)(iii)$ as needed to make reasonable progress towards natural visibility conditions for the period covered by the implementation plan.
	(iii) *** (A) Contributing States If the State has participated in a regional planning process, the State must also ensure that it has included, based on the factors listed in (f)(2)(i), all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process If the State does not include emission reduction measures identified by the downwind state as necessary to provide for reasonable progress through consultation or regional planning process, the State must demonstrate that those measures are not reasonable under the factors listed in (f)(2)(i).
	(B) States affected by contributing States. A State with a mandatory Class I Federal area in that area. The State may consider the effect of contributing States' emission reduction measures in setting reasonable progress goals.
	(C) the Administrator will take this information, and any information a State with a mandatory Class I Federal area relied upon in developing its RPG including identified emission reduction measures from contributing States
51.308(f)(2)(i)	Regardless of whether the affected Class I area is currently attaining, or is projected to attain, the uniform rate of progress,
51.308(f)(2)(iv)	As part of the demonstration required by $(f)(2)(i)$ The baseline emissions inventory year shall be reflective of the most recent year for which the State has submitted emission inventory information to the Administrator in compliance with the triennial reporting requirements of subpart A of this

	part. unless the State adequately justifies the use of another inventory year.		
51.308(f)(2)(v)	The State must identify all anthropogenic sources of visibility		
	impairment considered and analyzed by the State according to the		
	factors in (f)(2)(i) in requiring emission reduction measures and		
	developing its long-term strategy The state should consider <i>new and</i>		
	existing major and minor stationary sources, mobile sources and area		
	sources.		
51.308(f)(2)(vi)(C)	Emissions limitations and schedules for compliance to achieve the		
	reasonable progress goal. All emissions limitations and other		
	enforceable measures must be installed and operated as expeditiously		
	as practicable, even if they cannot be installed and operated by the		
	end of the planning period.		
51.308(f)(2)(vi)(E)	Basic smoke management practices for prescribed fire used for agricultural		
	and wildland vegetation management purposes and smoke management		
	programs as currently exist within the State for these purposes. Measures		
	to mitigate the impacts of fire and dust.		
51.308(f)(2)(vi)(H)	Measures to mitigate the impacts of greenhouses gases.		
51.308(f)(3)(i)	The long-term strategy and the reasonable progress goals must provide		
	for an improvement in visibility for the most impaired days and ensure no		
	degradation in visibility for the clearest days from the lowest measured		
	impairment of either the baseline period or current conditions		
	reported in any progress report or comprehensive periodic revision.		
51.308(f)(5)	the State must address in the plan revision the requirements of		
	paragraphs (g)(1) through (5) (7) of this section		
51.308(g)(1)-(7)	(1) A description of the status of implementation of each and all measures		
	included in the implementation plan for achieving reasonable progress		
	goals for mandatory Class I Federal areas both within and outside the		
	State.		
	(2) A summary description of the emission reductions achieved at		
	sources or groups of sources throughout the State through the		
	implementation of the measures described in paragraph (g)(1) of this section.		
	(3) The period for calculating current visibility conditions is the most		
	recent 5-year period preceding the required date or submittal date of the		
	progress report, whichever is later, for which data are available as of a		
	date 6 months preceding the required date or submittal date of the		
	progress report, whichever is later.		
	(4) *** (5) An assessment of any significant changes in anthropogenic emissions,		
	including those resulting from the measures described in paragraph		
	(g)(1) of this section, within or outside the State that have occurred since		
	the period addressed in the most recent plan required under paragraph (f)		
	of this section including whether or not these changes in anthropogenic		
	emissions were anticipated in that most recent plan and whether they have		
	limited or impeded progress in reducing pollutant emissions and		
1	Frank Land Land Land Market Ma		

T
improving visibility. The State should describe the measures it is taking
to address any unanticipated increases in anthropogenic emissions and
whether those measures are enforceable. The State should describe
whether any unanticipated decreases in anthropogenic emissions are
enforceable and how it is ensuring such decreases are maintained.
(6) ***
(7) A review of the State's visibility monitoring strategy and any
modifications to the strategy as necessary.
in order to achieve established goals for visibility improvement and
emissions reductions from sources or groups of sources
established goals for visibility improvement and emissions reductions
from sources or groups of sources
Within six months of a state's submission, EPA must act on each
progress report by issuing (1) a finding of adequacy where the agency
concludes that the state has fulfilled its obligation, (2) a finding of
inadequacy triggering a state requirement to address EPA specified
shortcomings within six months OR (3) a SIP call where the state fails
to timely submit or address shortcomings identified by EPA resulting
in the state's failure to meet commitments specified in the
comprehensive haze SIP.
_

TABLE OF CONTENTS

I.	SUMMARY OF RECOMMENDED REGULATORY CHANGES3			3
II.	BAC	KGRO	UND ON THE REGIONAL HAZE RULE	10
III.	COM	COMMENTS		
	A.	Reas	Reasonable Progress Goals and the Long-Term Strategy	
		1.	We support EPA's clarification of the relationship between the reasonable progress goals and the long-term strategy.	11
		2.	EPA should strengthen the showing required to justify achieving a slower rate of progress than the uniform rate of progress.	13
	B.	Othe	r Changes to 10 Year Plan Revisions	14
		1.	EPA should clarify that a state must adopt the amount of progress that is reasonable, even if it exceeds the uniform rate of progress	14
		2.	EPA should add language to ensure that each long-term strategy requires emission reductions, not just an analysis.	14
		3.	EPA must ensure improvement on the most impaired days and prevent degradation on the clearest days relative to improvement that has already been achieved.	15
		4.	EPA should require all states to use the same timeframe for baseline emissions.	17
		5.	Prior BART evaluations and determinations must not exempt a source from being considered for reasonable progress controls	18
	C.	Char	nges in Metrics for Tracking Reasonable Progress	20
		1.	Additions and changes to definitions	20
		2.	Differentiating anthropogenic and natural sources	22
		3.	Options for the use of existing and proposed tracking metrics	23
	D.	EPA Must Ensure Consideration of Emissions Resulting Directly and Indirectly from Human Activities, Including Fire, Dust, and Greenhouse Gases.		
		1.	EPA must ensure that emissions resulting directly from human activities are addressed, including greenhouse gases.	24
		2.	EPA must ensure that emissions resulting indirectly from human activities are also addressed.	25
		3.	An adjustment to the uniform rate of progress for prescribed fire is appropriate only if the four statutory factors have been considered	30

	4.	Enforceability of fire control measures	31	
	5.	Fire control measures are available	32	
E.	EPA's Proposal to Adjust the Uniform Rate of Progress to Account for the Influence of International Emissions is Premature and Likely to Result in an Offramp from Measures to Make Reasonable Progress.			
F.	Prog	ress Reports	38	
	1.	Changes to the content of progress reports	38	
	2.	EPA should retain the requirement that states submit progress reports as SIP revisions.	41	
	3.	Scheduling of progress reports	45	
G.	RAV	/I	46	
H.	Cons	siderations of Visibility in Determining Reasonable Progress	48	
	1.	Visibility improvement should not be a determining factor for reasonable progress controls.	48	
	2.	EPA should make clear that a 0.5 deciview change is perceptible	49	
I.		EPA Must Require Long-Term Strategies to Include Measures to Prevent and Remedy Impairment of Visibility.		
	1.	The 2002 PSD rule revisions exempt many modifications from PSD permitting that could result in large emission increases that could harm visibility.	50	
	2.	EPA must revise its regional haze regulations to ensure that long term strategies include measures to prevent and remedy visibility impairment.	52	
J.	Impr	oving Consultation	53	
	1.	Consultation with Federal Land Managers	53	
	2.	EPA should clarify that each state must adopt all necessary measures to ensure reasonable progress in each down wind Class I area affected by its pollution.	54	
K.		EPA's Proposal to Extend the Deadline for Regional Haze State Implementation Plans is Arbitrary, Capricious, and Contrary to Law		
	1.	EPA's proposal to extend the deadline for the submission of haze plans violates the plain language of the Clean Air Act	60	
	2.	EPA's rationales do not justify the proposed extension	62	
	3.	EPA's proposal to extend the deadline for regional haze SIP revisions fails to account for the likely delays in developing and approving SIP revisions.	63	

	4.	EPA's proposed deadline extension threatens the paramount purpose of the Clean Air Act to protect public health.	65
	5.	If EPA extends the deadline for regional haze SIP revisions, the agency should make clear that it may impose sanctions if states fail to submit timely and lawful SIP revisions.	67
L	. Triba	l Consultation	
CONCL	ONCLUSION 68		

II. BACKGROUND ON THE REGIONAL HAZE RULE

Since the nation's founding, the United States has valued its diverse and stunning natural scenery. *See, e.g.*, John Copeland Nagle, *The Scenic Protections of the Clean Air Act*, 87 N.D. L. Rev. 571, 576 (2011). In what has been lauded as "America's best idea," Congress first set aside national parks in the 19th century to preserve and celebrate some of the nation's most spectacular scenery. *Id.* With the nation's rapid industrialization, however, these remarkable scenic views have become increasingly marred by air pollution. *See id.* at 573. Today, air pollution is "perhaps the greatest threat to national parks," and pollution all too often degrades visibility in these iconic scenic areas. *Id.*

Recognizing the "intrinsic beauty and historical and archaeological treasures" of the national parks and wilderness areas, ¹ Congress established "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." 42 U.S.C. § 7491(a)(1). In 1990, after finding that the U.S. Environmental Protection Agency ("EPA") and the states had not made adequate progress toward reducing visibility impairment in the nation's Class I areas, ² Congress amended the Clean Air Act to curb emissions that may reasonably be anticipated to cause or contribute to visibility impairment at national parks and wilderness areas. *Id.* § 7492.

Congress delegated implementation of the Clean Air Act's visibility program to EPA. In 1999, EPA promulgated the Regional Haze Rule, which requires the states (or EPA where a state fails to act) to make incremental, "reasonable progress" toward eliminating human-caused visibility impairment at each Class I area by 2064. 40 C.F.R. § 51.308(d)(1), (d)(3). In the 1999 regulations, EPA recognized that haze pollution is a regional problem that requires regional solutions. Because haze results from a multitude of sources, states and EPA, with input of Federal Land Managers, must work collaboratively to evaluate all sources potentially affecting visibility and develop and execute plans to effectively remedy human-caused impairment.

In order to achieve the goal of natural visibility in Class I areas, implementation plans must contain "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward the national goal." 42 U.S.C. § 7491(b)(2). The Regional Haze Rule includes several interlocking measures designed to make "reasonable progress" towards achieving the 2064 natural visibility goal. These measures include requirements to (1) develop reasonable progress goals based on the evaluation of any and all sources contributing to visibility impairment; (2) determine baseline and natural visibility conditions; (3) create a long-term strategy for making reasonable progress; and (4) implement the best available retrofit technology (BART) for some of the oldest and dirtiest sources of haze-causing pollutants. *Id.*; 40 C.F.R. § 51.308(d), (e).

¹ H.R. Rep. No. 95-294, at 203-04 (1977), reprinted in 1977 U.S.C.C.A.N 1077, 1282.

² Areas designated as mandatory Class I Federal areas (or Class I for short) consist of national parks exceeding 6,000 acres, national wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. *See* 42 U.S.C. § 7472(a).

States were required to submit haze plans to EPA for the first planning period by December 17, 2007. 40 C.F.R. § 51.308(b). We are aware of only two states, North and South Carolina, that met the deadline. More than half of all states submitted their regional haze plan for the first planning period in 2010 or later, more than two years after the deadline. As a result, by the end of 2011, only two states had final haze plans approved by EPA. Even today, the following states still do not have final, complete haze plans for the first planning period: Alabama, Arkansas, Louisiana, Mississippi, Montana, Nebraska, Pennsylvania, and Texas.

Despite these significant delays, the regional haze program has made great strides in reducing emissions that contribute to haze. To date, from coal-fired power plants alone, regional haze plans have required reductions of 785,000 tons of sulfur dioxide and 420,000 tons of nitrogen oxides, along with a co-benefit of reducing more than 52 million metric tons of carbon dioxide.³

III. COMMENTS

A. Reasonable Progress Goals and the Long-Term Strategy

1. We support EPA's clarification of the relationship between the reasonable progress goals and the long-term strategy.

We support EPA's reordering of the long-term strategy and reasonable progress goal provisions to ensure that the provisions reflect the actual order in which the analyses are conducted. *See* 81 Fed. Reg. at 26,952; *see also* proposed 40 C.F.R. § 51.308(f)(1)-(6). For many years, EPA has interpreted the reasonable progress provisions of the Regional Haze Rule to mean that the four-factor analysis of reasonable controls precedes the setting of reasonable progress goals; once the control measures have been selected, goals are established which reflect the visibility improvement from implementing the controls. The proposed provisions in 40 C.F.R. § 51.308(f)(1)-(6) are a helpful clarification of the order in which states are expected to conduct the long-term strategy and reasonable progress goal analyses. By reorienting these provisions to reflect EPA's longstanding interpretation, EPA provides a clearer blueprint for states to follow in ascertaining reasonable progress goals and makes clear that states need not mitigate emissions from sources they cannot readily control, including some emissions related to wildfire and international pollution.

EPA should amend proposed section 40 C.F.R. § 51.308(f)(2)(vi)(C), which currently provides that a state must consider "[e]mission limitations and schedules for compliance to achieve the reasonable progress goal," in order to be consistent with proposed section 40 C.F.R. § 51.308(f)(2), which provides that the long-term strategy must contain emissions limitations and other measures "as are necessary to achieve reasonable progress." Specifically, the final text of

Air Markets Program Database

³ Values reflect finalized control measures and are compiled from state and federal implementation plans and EPA's Air Markets Program Database.

⁴ *See*, *e.g.*, 77 Fed. Reg. 23,988, 24,055-56 (Apr. 20, 2012) (proposed Montana haze plan); 81 Fed. Reg. 296, 308-13 (Jan. 5, 2016) (final Texas haze plan).

40 C.F.R. § 51.308(f)(2)(vi)(C) should read: "Emission limitations and schedules for compliance to achieve reasonable progress."

Furthermore, in recognizing that the determination of controls precedes the setting of reasonable progress goals, EPA should clarify that, if necessary, a state or EPA can require that the long-term strategy controls be implemented after the conclusion of the planning period for which the plan is developed if the situation demands it to assure reasonable progress. Although EPA anticipates that "only in an unusual situation would a reasonable compliance deadline be more than 5 years after EPA approval of the SIP,"5 it is possible that future delay in comprehensive SIP revisions would mean that compliance deadlines would fall past the end of the planning period. This was an issue in some cases during the first planning period; for instance, in EPA's 2016 regional haze Federal Implementation Plan ("FIP") for Texas, the utilities and the state argued that EPA lacked authority to require the proposed controls because they could not be installed—and therefore would not achieve any benefit—"over the period of the implementation plan." See 40 C.F.R. § 51.308(d)(1). In other cases, regional haze plans set enforceable retirement dates for units that were past the end of the first planning period but which were nonetheless reasonable for inclusion in the long-term strategy. E.g., 79 Fed. Reg. 12,944, 12,945 (Mar. 7, 2014) (requiring one unit at the Northeastern Power Station to meet emission limits and decrease capacity utilization through 2026, and to shut down by the end of 2026).

We propose the following language to be added to 40 C.F.R. $\S 51.308(f)(2)$ and 40 C.F.R. $\S 51.308(f)(2)(vi)(C)$ to address this situation:

All emissions limitations and other enforceable measures must be installed and operated as expeditiously as practicable, even if they cannot be installed and operated by the end of the planning period.

We also support EPA's proposal to clarify in 40 C.F.R. § 51.308(f)(2)(i) and 40 C.F.R. § 51.308(f)(2)(iv) that all states have an obligation to conduct a four-factor analysis of control measures that should be required as part of the long-term strategy. Given that the problem of haze is regional, the solution must be regional as well. Regional haze cannot be eliminated if only the states with Class I areas reduce emissions.

For example, modeling demonstrates that emissions from Gerald Gentleman Station in Nebraska, which has no Class I areas of its own, has a significant impact on regional Class I areas, including Wind Cave and Badlands National Parks in South Dakota as well as Rocky Mountain National Park in Colorado. 77 Fed. Reg. 12,770, 12,779 (Mar. 2, 2012). Cost effective controls are available, and the regional planning organization even assumed that these controls would be implemented. In its SIP, however, Nebraska declined to require emissions reductions from Gerald Gentleman Station. While we believe the text of the existing regulation requires a source like Gerald Gentleman to reduce its emissions to make reasonable progress,

⁵ EPA, Draft Guidance on Progress Tracking Metrics, Long-term Strategies, Reasonable Progress Goals and Other Requirements for Regional Haze State Implementation Plans for the Second Implementation Period, at 114 (July 2016) [hereinafter Guidance].

EPA's clarification here will help guard against confusion or hint at an off ramp for sources in states without Class I areas.

2. EPA should strengthen the showing required to justify achieving a slower rate of progress than the uniform rate of progress.

EPA needs to adopt stronger rules to prevent foot-dragging by states in achieving the uniform rate of progress ("URP") or faster progress where reasonable. In the first round of haze plans, numerous states (and in some cases EPA itself) adopted plans whose rates of progress will not achieve natural conditions in affected Class I areas until decades past 2064, and in many cases not for literally hundreds of years. *See* Exhibit A. In some cases, the time to natural conditions is projected to be more than 500 years. By no stretch of the imagination, can these kinds of centuries-long timeframes for achieving the national goal be deemed reasonable, or consistent with Congress's intent. In defending the original Regional Haze Rule, EPA itself stated: "Certainly the courts would not find it difficult to affirm an EPA decision finding a state plan 'unreasonable' if . . . a state proposes to improve visibility so slowly that the national visibility goal would not be achieved for 200 or 300 years despite the availability of more stringent, cost-effective measures." EPA Brief, *Am. Corn Growers Ass'n v. EPA*, No. 99-1348, at 81-82 (Jan. 25, 2002). Yet EPA has repeatedly approved or promulgated haze plans with times to natural conditions as long as or even longer than 200 to 300 years.

EPA has proposed to strengthen the showing required for states whose plans do not provide for at least the uniform rate of progress, and we support such strengthening. For example, the additional analysis required under proposed section 51.308(f)(3)(ii)(A) is a step in the right direction. If a State in which a Class I area is located sets a reasonable progress goal ("RPG") for the most impaired days that provides for a slower rate of improvement than the uniform rate of progress, the State must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the State that may reasonably be anticipated to contribute to visibility impairment in the Class I area that would be reasonable to include in the long term strategy. See proposed 40 C.F.R. § 51.308(f)(3)(ii)(A). The State "must provide a robust demonstration, including documenting the criteria used to determine which sources or groups of sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy." Id. The state must further provide for public review an assessment of the number of years it would take to attain natural visibility conditions under the rate of progress selected by the state as reasonable. Id.

Although these are helpful improvements, they are not sufficient. Merely requiring a state to document and explain why no additional measures are "reasonable" based on the relevant factors does not sufficiently limit states from adopting the grossly protracted progress schedules we saw in the first planning period. At a minimum, EPA must impose a heavy burden on states that are not on the glide path for a given Class I area to prove that there are no additional available and reasonable measures that would hasten the time to natural conditions. EPA must further adopt a strong presumption that, for sources that are contributing to visibility impairment in the relevant Class I area (for which additional measures are needed to achieve the URP), it is reasonable to require emission reductions at least as great as already being achieved by the best performing comparable sources in the same or other states. EPA further needs to add a separate

requirement that the state specifically demonstrate, and that EPA specifically determine, that any timeframe past 2064 for achieving natural conditions is the fastest schedule reasonably possible and is consistent with Congress' intent in enacting the regional haze provisions. Finally, EPA needs to make clear in the preamble to the final rule that states need to avoid a repeat of the situation in the first round of plans, where many states adopted progress goals that extend many decades beyond 2064, and in many cases for hundreds of years.

B. Other Changes to 10 Year Plan Revisions

1. EPA should clarify that a state must adopt the amount of progress that is reasonable, even if it exceeds the uniform rate of progress.

EPA should add language to the rule to clarify that states must set reasonable progress goals and require long-term strategy control measures to make reasonable progress regardless of whether the Class I area in question is meeting the uniform rate of progress. This would be consistent with EPA's long-standing interpretation of the haze rule. *See* 79 Fed. Reg. 74,818, 74,834 (Dec. 16, 2014) ("[T]he URP does not establish a 'safe harbor' for the state in setting its progress goals."). Indeed, in the preamble to the 1999 Regional Haze Rule, EPA stated that:

If the State determines that the amount of progress identified through the [URP] analysis is reasonable based upon the statutory factors, the State should identify this amount of progress as its reasonable progress goal for the first long-term strategy, unless it determines that additional progress beyond this amount is also reasonable. If the State determines that additional progress is reasonable based on the statutory factors, the State should adopt that amount of progress as its goal for the first long-term strategy.

64 Fed. Reg. 35,714, 35,732 (July 1, 1999). Specifically, we recommend that EPA add the following language at the beginning of the first sentence of the proposed section 40 C.F.R. § 51.308(f)(2)(i): "Regardless of whether the affected Class I area is currently attaining, or is projected to attain, the uniform rate of progress,"

2. EPA should add language to ensure that each long-term strategy requires emission reductions, not just an analysis.

States contributing to impairment must reduce their emissions that contribute to impairment, in order to satisfy the statutory requirements that each haze plan contain "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress" 42 U.S.C. § 7491(b)(2). To comply with this statutory mandate, the long-term strategy regulations must require more than just an adequate *analysis*; each plan must also require adequate emission limits and other enforceable measures to make reasonable progress. *See id.*

⁶ In the draft guidance on reasonable progress analyses, EPA reaffirms that "nor does meeting or exceeding the URP crease a safe harbor that exempts states from the requirements of the Regional Haze Rule." Guidance, *supra* note 5, at 18.

The statute requires consideration of the four reasonable progress factors relative to "any existing source subject to such requirements." 42 U.S.C. § 7491(g)(1). The current version of 40 C.F.R. § 51.308(d)(1)(i)(A) requires states to consider the four statutory factors with regard to "any potentially affected sources." The equivalent provision in the proposal, 40 C.F.R. § 51.308(f)(2)(i), however, requires four-factor analysis of "any potentially affected major or minor stationary source or group of sources." (emphasis added). The addition of this language limiting which sources should be considered is contrary to the statutory goal, and has the potential to significantly undermine the ability to meet the national goal. Based on its statements elsewhere, it does not appear that EPA actually intends to constrain four-factor analysis to only this subset of sources. For instance, in the preamble, EPA discusses the possibility that states might "select' wildland prescribed fire under [40 C.F.R. § 51.308(f)(2)(v)] as an anthropogenic source of visibility impairment for which it must consider and analyze emission reduction measures . . . based on the four reasonable progress factors listed in § 51.308(f)(2)(i)." 81 Fed. Reg. at 26,958. However, there is nothing in 40 C.F.R. § 51.308(f)(2)(v) that compels states to apply the four factors listed in 40 C.F.R. § 51.308(f)(2)(i) to wildland prescribed fire or any other emission source the state "selects" that is not a major or minor stationary source or group of sources.

We suggest the following changes, in bold and strike-through, to proposed section 40 C.F.R. § 51.308(f)(2) in order to conform to the statute:

- (2) Long-term strategy for regional haze and reasonably attributable visibility impairment. Each State must submit a long-term strategy that addresses, **prevents**, **and remedies** regional haze visibility impairment . . .
- (i) The State must consider, **and** analyze, **and require** emission reduction measures based on the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected **major or minor stationary** source or group of sources. The State must document the criteria used to determine which sources or groups of sources were evaluated, and how these four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.
 - 3. EPA must ensure improvement on the most impaired days and prevent degradation on the clearest days relative to improvement that has already been achieved.

In 40 C.F.R. § 51.308(f)(3)(i), EPA proposes to allow the 2000-2004 monitored baseline condition for the 20 percent clearest⁷ and 20 percent most impaired days to be used as the permanent baseline for establishing reasonable progress goals for every future planning period. This contradicts the intent and wording of the statute and current regulations.

⁷ EPA's proposal introduces the term "20 percent clearest days." That term is defined as the 20 percent of monitored days with the lowest deciview values. This term is meant to distinguish from the days with the least impairment since EPA is now defining impairment to mean only visibility degradation due to anthropogenic sources. *See* 81 Fed. Reg. at 26,955

The 1999 Regional Haze Rule required that monitored conditions would be used in determining the least-impaired and most-impaired impaired days. As noted in the proposal, the use of monitored conditions in tracking the most-impaired days has generally worked well, but can be confounded by impacts from natural emissions such as some wildfires and dust storms that are not influenced by humans. The proposal goes on to address this issue by better defining the process for setting reasonable progress goals for the most-impaired days.

Unlike the most-impaired days, monitoring data for the clearest days are not impacted by extreme, natural emissions events. They are, however, affected by anthropogenic emissions. An examination of the clearest days at 95 IMPROVE monitoring stations representing 104 mandatory Class I Federal areas found that 83 of the monitors show statistically significant improvement for the 20 percent clearest monitoring days from 2000 to 2014. The remaining 12 monitors show minor improvement. No monitoring station recorded a degradation of visibility for the clearest days. This examination demonstrates that reductions in anthropogenic emissions have led to progress toward the national goal of no human-caused impairment for the clearest days. *See* Exhibit B.

In addition, the recent monitoring data show that the 20 percent clearest days are impaired when compared to estimates of natural conditions. The Clean Air Act goal of making reasonable progress toward the national goal continues to apply to all days, including the clearest days. 42 U.S.C. § 7491(b)(2) requires each state implementation plan "to contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal." Under the existing regulations at 40 C.F.R. § 51.308(d)(1), states are required to establish reasonable progress goals for each planning period that "ensure no degradation in the least impaired days over the same period" and "provide for reasonable progress towards achieving natural visibility conditions." In the reporting requirements of 40 C.F.R. § 51.308(g)(3)(iii), each state must report on "[t]he change in visibility impairment for the most impaired and least-impaired days over the past 5 years." The 1999 language was specifically crafted to carry forward the statutory goal and assure that any progress made in eliminating anthropogenic impairment on the 20 percent clearest days during a planning period would not be reversed in subsequent periods. Allowing states to "plan" for degradation in the 20 percent clearest days by setting a deciview goal based on the 2000-2004 baseline period, after documenting that the current conditions for the 20 percent clearest days have improved from the baseline period, contradicts the Clean Air Act requirement that the State make "reasonable progress" toward the national goal.

Likewise, significant progress has been made on the 20 percent most impaired days since the 2000-2004 baseline period. EPA's proposed language in 40 C.F.R. § 51.308(f)(3)(i) threatens to undercut this progress by only requiring improvement relative to the 2000-2004 baseline. Under this framework, states could allow visibility to degrade relative to improvements that have already been achieved. Again, allowing states to "plan" for degradation or failing to improve upon progress already achieved is contradictory to the goal of reasonable progress. Since the proposal and associated guidance documents provide great detail on the process for determining reasonable progress goals for the most impaired days, it is unlikely that

⁸ 40 C.F.R. § 50.301.

EPA intends for the baseline to be used in any future SIP. Accordingly, EPA should revise the proposed language for 40 C.F.R. § 51.308(f)(3)(i) to remove any ambiguity.

To ensure that the Clean Air Act's visibility protection mandate is advanced and that the revised regulations are not in conflict with the national goal in 42 U.S.C. § 7491(a)(1), EPA should change the language of proposed 40 C.F.R. § 51.308(f)(3)(i) to read as follows:

A state in which a mandatory Class I Federal area is located must establish reasonable progress goals (expressed in deciviews) that reflect the visibility conditions that are projected to be achieved by the end of the applicable implementation period as a result of all enforceable emissions limitations, compliance schedules, and other measures required under paragraph (f)(2) and the implementation of other requirements of the CAA. The long-term strategy and the reasonable progress goals must provide for an improvement in visibility for the most impaired days and ensure no degradation in visibility for the clearest days from the lowest measured impairment of either the baseline period or current conditions reported in any progress report or comprehensive periodic revision.

4. EPA should require all states to use the same timeframe for baseline emissions.

EPA has proposed to allow states flexibility in the baseline emission inventory year. Specifically, the proposed revisions to 40 C.F.R. § 51.308(f)(2)(iv) state that "[t]he baseline emission inventory year shall be the most recent year for which the State has submitted emission inventory information to the Administrator in compliance with the triennial reporting requirements of [40 C.F.R. Part 51, Subpart A] unless the State adequately justifies the use of another inventory year." 81 Fed. Reg. at 26,972. However, allowing states too much flexibility in selecting a baseline emission inventory year can skew the cost effectiveness calculations such that it becomes difficult to make comparisons between sources in different states regarding whether control costs are reasonable.

During the first round of regional haze plans, some BART analyses were based on more recent emission inventory baselines than the 2000-2004 timeframe. 9 This allowed sources to take into account recently installed nitrogen oxides (" NO_x ") combustion controls as part of the baseline, which made the cost effectiveness of add-on NO_x controls such as selective catalytic reduction ("SCR") appear to be less cost-effective compared to other similar source analyses that used 2000-2004 as a baseline and evaluated the cost effectiveness of the combination of combustion controls (low NO_x burners and overfire air) and add-on NO_x controls such as SCR.

To provide states with some flexibility while still ensuring that the emissions inventory is consistent across states and reflective of the most recent emissions inventory, EPA should

17

 $^{^9}$ See, e.g., 77 Fed. Reg. 23,988, 24,023 (Apr. 20, 2012) (EPA used a 2008-2010 period for baseline emissions at Colstrip Units 1 and 2, reflective of a lower NO_x limit that became effective in 2007); 77 Fed. Reg. 12,770, 12,779 (Mar. 2, 2012) (Nebraska used a later baseline for its BART analysis for Gerald Gentleman Station reflective of emissions after NO_x controls were installed. EPA did not allow for that baseline).

instead allow for the emission inventory to be from a 3 to 5-year period before the date a revised regional haze SIP is submitted to EPA. EPA should encourage the use of a 2 to 3-year average of emissions for sources with emissions that varied during the timeframe, which can be determined based on reviews of annual emissions for a source, if available, or based on production data and hours of operation. A 2 to 3-year average would ensure that the emission inventory takes into account the variability in annual production and emissions that occurs at many source types. In general, this was the approach EPA laid out for the first round of regional haze SIPs and it makes sense to continue with a consistent and representative baseline for all future regional haze SIP submittals.

We recommend the following regulatory changes to the revisions proposed in 40 C.F.R. § 51.308(f)(2)(iv) to ensure that a 2 to 3-year average of emissions is allowed for:

As part of the demonstration required by (f)(2)(i)...The baseline emissions inventory year shall be *reflective of* the most recent year for which the State has submitted emission inventory information to the Administrator in compliance with the triennial reporting requirements of subpart A of this part. unless the State adequately justifies the use of another inventory year.

Requiring that the baseline emission inventory be reflective of the most recent annual emissions inventory is consistent with EPA's intent for states to use the most recent data, and provides flexibility for states to use a longer term average of emissions (if such data is available for a source) that is reflective of current emissions.

5. Prior BART evaluations and determinations must not exempt a source from being considered for reasonable progress controls.

EPA states that sources that were eligible for best available retrofit technology "may need to be re-assessed for additional controls in future implementation periods" for regional haze SIPs. 81 Fed. Reg. at 26,947. EPA goes on to state that sources that installed minor controls, or no controls at all, will need to be re-assessed for controls, and EPA implies that sources which installed more significant controls will not need to be reassessed for controls to achieve reasonable progress. *Id.* However, sources that were subject to BART evaluations and BART determinations should not be exempt from reasonable progress analysis regardless of the outcome of those analyses. We request that EPA make this clear in the final rulemaking and in the associated guidance.

As EPA acknowledges, some BART-eligible sources ultimately were not subject to any emission reductions or were subject to "minor controls" under BART determinations. These sources must be considered for pollution control upgrades and/or lower emission limits to achieve reasonable progress. In general, states and EPA concluded that BART-eligible sources with a projected impact of less than 0.5 deciviews on a Class I area were not subject to BART. See 40 C.F.R. pt. 51, App. Y, § III(A)(1). But 0.5 deciviews should not be a threshold for determining whether a source is subject to a reasonable progress control analysis. As EPA has stated in its Draft Guidance for the second implementation period, "[p]rogress towards natural visibility conditions will require the accumulation of reductions in air pollution and associated

light extinction that may not be individually perceptible." Thus, EPA has stated it "expects that visibility impacts and available benefits from many individual sources . . . will be notably lower than 0.5 deciview, yet additional control of some of those will be necessary to make reasonable progress."

Even sources that were subject to pollution control requirements under BART should be evaluated for controls to achieve reasonable progress. In many instances, states and EPA did not require the most effective pollution controls as BART.¹² In other cases, sources, states, and EPA based BART on the use of the most stringent pollution control available, but failed to require an emission limit that reflects the lowest level achievable with the technology.¹³ EPA must not exempt these sources that installed major pollution controls under BART or another Clean Air Act program from being reviewed for reasonable progress controls, when significant sulfur dioxide ("SO₂") and/or NO_x emission reductions can be realized by requiring the controls to be optimized and used year-round. In both situations, the sources should not be exempt from an evaluation of reasonable progress measures.

One of the five factors for determining whether a particular control should be required as BART is the visibility benefit of the control and/or emission limit. 40 C.F.R. pt. 51, App. Y, § IV(D). In some cases, states or EPA did not require the most stringent pollution control technology to meet BART due to the projected visibility benefits. However, as discussed elsewhere, consideration of visibility is not one of the four statutory factors to be taken into account in determining reasonable progress controls or measures. Accordingly, sources previously evaluated for BART should be considered for new or additional controls, more stringent emission limits, or other emission reduction measures to achieve reasonable progress.

¹⁰ See Guidance, supra note 5, at 1.

¹¹ *Id.* at 74.

 $^{^{12}}$ For example, many EGUs were required to install low NO_x burners and overfire air to meet NO_x BART, but were not required to install SCR systems, which can remove the highest percentage of NO_x emissions. Such EGUs must be considered for add-on NO_x controls to achieve reasonable progress. Both SCR and the less effective selective noncatalytic reduction ("SNCR") typically are installed along with upgraded combustion controls, because the reduced NO_x emission rates from the combustion controls reduce both the capital and operational costs of the add-on SCR or SNCR systems.

¹³ For example, many states that required the installation of scrubbers to meet SO₂ BART simply imposed the 0.15 lb/MMBtu presumptive BART limit, without an evaluation of or requirement for the highest levels of SO₂ reductions that could be achieved with new scrubbers or even an evaluation of EPA's other presumptive SO₂ BART limit of 95% control. *See* 40 C.F.R. pt 51, App. Y, Section IV(E)(4). Other EGUs installed SCRs to meet CSAPR, but are not required by permit to operate the SCRs year-round. Some units with SCR have been curtailing use of their SCRs even during the ozone season due to the low cost of NO_x allowances. *See*, *e.g.*, Thomas F. McNevin (2016), Recent increases in nitrogen oxide (NO_x) emissions from coal-fired electric generating units equipped with selective catalytic reduction, Journal of the Air & Waste Management Association, 66:1, 66-75, DOI: 10.1080/10962247.2015.1112317.

¹⁴ See 42 U.S.C. § 7491(g) which outlines the four factors to be taken into account in determining reasonable progress: the cost of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any source subject to such requirements. The impacts on visibility in any Class I area are not a consideration for reasonable progress controls.

For example, the State of Nebraska had several electrical generating units (EGUs) and other sources that were BART-eligible. *See* 77 Fed. Reg. at 12,777-78. Of those sources, only the Nebraska City and Gerald Gentleman EGUs were determined to be subject to BART. *Id.* However, neither EGU was required to install pollution controls for SO₂ emissions. ¹⁵ Gerald Gentleman is a particularly dramatic example of a source that was subject to BART, but no pollution controls were required, and therefore a reasonable progress analysis must occur.

In summary, in determining appropriate controls to achieve reasonable progress, EPA should not allow for any source exemption from review simply because of a prior BART determination. If a source is screened in to a four-factor analysis under the Long Term Strategy and was subject to a prior BART determination, EPA should still recommend an evaluation of the source to see whether additional emission reductions are justified, whether through strengthening of emission limits to reflect the full capabilities of pollution controls installed, requiring year-round operation of existing controls, imposing shorter averaging time (24-hour or at maximum 30-day) where currently not applicable, and/or requiring cost-effective improvements/upgraded to the pollution controls already installed at a source. EPA should not prematurely exempt any sources from this analysis, even those that were required to install more significant controls to meet BART.

C. Changes in Metrics for Tracking Reasonable Progress

EPA has proposed changes to how days are selected for tracking progress. In general, we agree with the intention of EPA's proposed changes to clarify that the focus of the Regional Haze Rule is on eliminating and preventing human-caused haze, not natural sources of haze. However, there are also areas that should be modified or improved.

1. Additions and changes to definitions

The changes in the rule text related to this topic include modifying 40 C.F.R. § 51.301 by adding definitions for "Clearest days," "Deciview index," "Natural visibility conditions," and "Visibility," and revising the definitions of "Deciview," "Least impaired days," "Most impaired days," and "Visibility impairment." These proposed additions and revisions are laid out below.

Existing Definitions	Proposed Definitions
N/A	Clearest days means the twenty percent of
	monitored days in a calendar year with the
	lowest values of the deciview index.
Deciview means a measurement of visibility	Deciview is the unit of measurement on the
impairment. A deciview is a haze index	deciview index scale for quantifying in a
derived from calculated light extinction, such	standard manner human perceptions of
that uniform changes in haziness correspond	visibility.
to uniform incremental changes in perception	

 $^{^{15}}$ 77 Fed. Reg. 40,150-69, 40,151 (July 6, 2012). Note that EPA relied on the Cross State Air Pollution Rule ("CSAPR") to meet BART for SO₂ at Gerald Gentleman Units 1 and 2, but that emissions trading program did not specifically mandate the installation of any SO₂ pollution controls at the Gerald Gentleman units or lead to any meaningful reductions in SO₂ emissions.

across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements):	Deciview index means a value for a day that is derived from calculated or measured light extinction, such that uniform increments of the index correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to very obscured. The deciview index is calculated based on the following equation (for the purposes of calculating deciview using IMPROVE data, the atmospheric light extinction coefficient must be calculated from aerosol measurements and an estimate of Rayleigh scattering): Deciview index = 10 ln _e (b _{ext} /10 Mm ⁻¹). b _{ext} = the atmospheric light extinction coefficient, expressed in inverse megameters (Mm ⁻¹)
Least impaired days means the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the lowest amount of visibility impairment.	Least impaired days means the twenty percent of monitored days in a calendar year with the lowest amounts of visibility impairment.
Most impaired days means the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the highest amount of visibility impairment.	Most impaired days means the twenty percent of monitored days in a calendar year with the highest amounts of visibility impairment.
N/A	Natural visibility conditions means visibility (contrast, coloration, and texture) that would have existed under natural conditions. Natural visibility conditions vary with time and location, and are estimated or inferred rather than directly measured.
N/A	Visibility means the degree of perceived clarity when viewing objects at a distance. Visibility includes perceived changes in contrast, coloration, and texture of elements in a scene.
Visibility impairment means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.	Visibility impairment means any humanly perceptible difference between actual visibility conditions and natural visibility conditions. Because natural visibility conditions can only be estimated or inferred, visibility impairment also is estimated or inferred rather than directly measured.

We support the proposed introduction of the term "clearest days" and the revisions to "least impaired days" and "most impaired days." The statutory goal is to prevent and remedy impairment resulting from "manmade air pollution." 42 U.S.C. § 7491(a)(1). A focus on human-caused impairment has always been the intent of the Regional Haze Rule, and EPA's proposed changes should help to sharpen that focus.

The proposed definitions for "natural visibility conditions," and "visibility," do not include references to light extinction and visual range that are part of the existing regulation's definitions of "visibility impairment" and "natural conditions." These are both common methods of measuring visibility. Light extinction provides an absolute, rather than relative, measure of visibility conditions, and is the basis for the deciview index. Visual range is one of the visibility metrics which is most easily understood by the public. 42 U.S.C. § 7491(g)(6) defines "visibility impairment" to include "reduction in visual range." The final rule should consistently refer to "light extinction, visual range, contrast, coloration, and texture" in the definitions of "natural conditions," "natural visibility conditions," and "visibility."

We agree that natural visibility conditions, and by extension visibility impairment, are estimated or inferred rather than directly measured. However, it would be helpful for EPA to make clear that actual visibility conditions are directly measured.

2. Differentiating anthropogenic and natural sources

EPA notes that it is not proposing to codify any particular method for estimating natural conditions and relatedly allocating PM components between natural and anthropogenic sources, this is addressed in the proposed guidance. For the purposes of clarity, transparency, and reducing potential conflict, it is preferable for states to use the same methodology. In the last planning period, the majority of states relied on a common, default approach to determining natural visibility conditions based on EPA guidance and refined in conjunction with EPA. In Texas, however, the state determined its own values for natural conditions based on the unproven and inherently unreasonable assumption that 100% of the coarse mass and fine soil was natural rather than human-caused. 79 Fed. Reg. at 74,831. This led to the nonsensical conclusion that Carlsbad Caverns, in New Mexico, and Guadalupe Mountains, in Texas, had significantly different natural conditions despite being represented by the same IMPROVE monitor. We urge EPA to provide a common set of default values for the forthcoming planning period, or at a minimum, a straightforward and consistent methodology establishing a high bar for justifying the use of an alternate methodology for calculating natural conditions.

In the final rule, EPA should include definitions for "natural" and "anthropogenic" such that states have a common basis as a starting point for distinguishing between the two. Based on the existing statutory language defining "manmade air pollution" in 42 U.S.C. § 7491(g)(3), EPA should define these terms as follows:

¹⁶ See Guidance, supra note 5, at 32. See also discussion at 79 Fed. Reg. at 74,830-31.

¹⁷ 79 Fed. Reg. 74,818 (Dec. 16, 2014); 81 Fed. Reg. 296 (Jan. 5, 2016); EPA Technical Support Document for the Oklahoma and Texas Regional Haze Federal Implementation Plans, November 2014; EPA Technical Support Document for the Texas Regional Haze State Implementation Plan, November 2014; EPA Response to Comments for the Federal Register Notice for the Texas and Oklahoma Regional Haze State Implementation Plans..

Anthropogenic means resulting, directly or indirectly, from human activities.

Natural means not resulting, directly or indirectly, from human activities.

In several places in the preamble, EPA refers to emissions which are controllable or uncontrollable rather than anthropogenic or natural. Although similar in meaning, referring to "controllable" emissions could be misinterpreted to indicate that only emissions with existing means of control (i.e., specific control technologies or measures) should be evaluated, which would be inconsistent with the statute. In the final rule, as in the proposed rule text, EPA should exclusively use the terms anthropogenic and natural.

3. Options for the use of existing and proposed tracking metrics

In addition to the new and revised definitions, EPA proposes two options for new tracking metrics. In the first option, all states would be required to use the new definitions which focus on the most impaired days rather than the current approach of looking at the days with the highest overall deciview index values. In the second option, states could choose between the current and proposed metrics.

In general, consistency among states leads to a better, more equitable, and more transparent outcome. For that reason, we support the first approach under which all states would use the new tracking metric for all future planning periods, including the second planning period. However, we recognize that some states have already begun their planning process for the plans currently due in 2018. We would support a one-time exception whereby states which submit their plans by the existing 2018 deadline could rely on the current metric for the second planning period only.

EPA also notes that under the first approach, "states would still have the option to also present the visibility data using the current approach . . . [which] may help communicate to the public the magnitude of impacts from natural sources" 81 Fed. Reg. at 26,955. We believe that information about actual visibility conditions is critical to public understanding of visibility conditions. Furthermore, it is readily available from IMPROVE, and states will necessarily use it in developing their SIPs. The final rule should require states to include information about actual visibility conditions in their SIPs, regardless of the tracking metric used. In doing so, it would be helpful for EPA to include a definition of "haziest days" as a counterpart to "clearest days", which would be defined as "the twenty percent of monitored days in a calendar year with the highest values of the deciview index."

D. <u>EPA Must Ensure Consideration of Emissions Resulting Directly and Indirectly from Human Activities, Including Fire, Dust, and Greenhouse Gases.</u>

42 U.S.C. § 7491(a)(1) sets the goal of preventing and remedying impairment of visibility "which impairment results from manmade air pollution." The statute further defines "manmade air pollution" as "air pollution which results *directly or indirectly* from human activities." 42

U.S.C. § 7491(g)(3) (emphasis added). EPA must make sure that the regulation requires consideration of all visibility impairing pollutants, including greenhouse gases, resulting directly or indirectly from human activities, including exclusively human sources like stationary sources, as well as human-influenced sources like some fire and dust. At the same time, it is clear that states should not be penalized by having to perform the additional demonstration in the proposed 51.308(f)(3)(ii) as a result of, or have to compensate for, emissions that are wholly natural in origin, and totally beyond human control.

We discuss below the following recommendations which should be reflected in the final rule to appropriately address these issues:

- Exclusively human emissions must be addressed, including greenhouse gases;
- Control measures for fire, including prescribed and managed fire as tools to reduce wildfire emissions, must be evaluated to benefit both short- and long-term air quality;
- Adjustments to the URP based on the impacts of prescribed fire must be predicated
 on four factor analysis of prescribed fire, including consideration of the ecosystem
 benefits of prescribed fire; and
- Fire control measures must be enforceable.
 - 1. EPA must ensure that emissions resulting directly from human activities are addressed, including greenhouse gases.

The Regional Haze Rule is intended to eliminate and prevent visibility impairment, which by definition is the result of human activities. Sources that are exclusively or directly human, such as industrial emissions, mobile sources, etc. have a significant impact on visibility in all Class I areas. This is true both in comparison to existing, or "dirty" conditions, and even more so in comparison to natural, or "clean" conditions, *see supra* Section III(C), even in Class I areas where less directly anthropogenic emissions sometimes dominate. Exclusively anthropogenic sources are an obvious place to reduce emissions because they are entirely the result of human choices and within human control. Therefore, it should be clear in the final rule that, regardless of the influence of other sources on haze, exclusively human emission sources must be addressed within each periodic comprehensive revision. This is in line with the statutory requirement to prevent and remedy *any* visibility impairment resulting from anthropogenic activity. 42 U.S.C. § 7491(a)(1). We anticipate that EPA's new tracking metrics, discussed more fully *supra* Section III(C) as well as in our comments on EPA's proposed guidance, will help ensure that directly human emissions are in fact analyzed and reduced.

The final rule must also make explicit that greenhouse gases are themselves a visibility impairing pollutant acting through the mechanism of climate change, and that as a consequence these must be considered in states' long-term strategies. Climate change, which is a result of human activity, contributes to visibility impairment in a number of ways. First, it increases both the frequency and intensity of wildfires. In the guidance document EPA rightly recognizes the role of human-caused climate change as a cause of increases in wildfire activity in recent decades. In the western United States, changes in climate have been determined to be the

primary cause of increased wildfires. ¹⁸ Further, the likelihood of fires started by unauthorized use or accidental human activity is greater when the climate changes make areas more susceptible to wildfire. Second, climate change increases emissions of volatile organic compounds (VOCs) from biogenic sources. Third, climate change increases oxidation of SO_2 and NO_x in the atmosphere. For these reasons, the rule revisions should explicitly require consideration of greenhouse gases by adding a section 51.308(f)(2)(vi)(H) which reads, "Measures to mitigate the impacts of greenhouses gases."

2. EPA must ensure that emissions resulting indirectly from human activities are also addressed.

The second part of the statutory definition of "manmade" or anthropogenic emissions deals with "air pollution which results...indirectly from human activities." These are sources that arise from a complex interaction of natural and human influences. As EPA notes in its proposed guidance, "a state is expected to consider controls on human-influenced sources that are also affected by natural events, for examples, windblown dust from soils that have been disturbed by human activity." Guidance, *supra* note 5, at 83. The final rule must make sure that such indirect, or human-influenced sources are, in fact, considered and reduced.

In addition to dust, fire is another example of a human-influenced emission source. There are complex dynamics between natural fire regimes and human management of fire. A legacy of fire suppression has created unbalanced, fire-prone ecosystems and human-caused climate change has increased the frequency and intensity of wildfires. Humans are involved in the management of virtually all fire in the United States, whether it is in the ignition of or the response to the fire.

We recognize that there has been significant concern about the large impact that fire has on haze in western states, and appreciate EPA's effort to define a path forward on these complicated issues. We recognize the importance of fire for the health of many ecosystems, as well as the importance of healthy ecosystems to long-term air quality. Some fire obviously should be considered as part of natural visibility conditions.

However, EPA's approach to dealing with fire in the regulation is far too prescriptive and precludes appropriate consideration of control measures that could promote ecologically healthy landscapes while minimizing both short-term and long-term air quality impacts. The final rule must be modified in three critical ways to make sure that human-influenced sources, particularly fire, are considered.

i. All wildland wildfire cannot be considered natural.

First, the final rule cannot define all wildland wildfire as natural. The EPA has proposed to define "wildfire" as "any fire started by an unplanned ignition caused by lightning; volcanoes; other acts of nature; unauthorized activity; or accidental, human-caused actions; or a prescribed

¹⁸ Westerling, A.L., H.G. Hidalgo, D.R. Cayan, and T.W. Swetnam, Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity, *Science*, Vol. 313, August 18, 2006, at 940-943.

fire that has been declared to be a wildfire." 81 Fed. Reg. at 26,969. EPA proposes further that "[a] wildfire that predominantly occurs on wildland is a natural event." *Id.* EPA proposed to define "wildland" as "an area in which human activity and development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered." *Id.* EPA's proposed revisions to the Regional Haze Rules indicate that "emissions from wildfires are natural emissions that contribute to natural visibility conditions," and thus EPA will not require states to consider "whether measures from wildfires are necessary for reasonable progress towards natural visibility conditions." *Id.* at 26,957. EPA also states that "because wildland wildfires are natural events, emissions from wildland wildfires do not contribute to 'visibility impairment' given that this term refers only to reductions in visibility attributable to anthropogenic sources." *Id.* EPA further states its intent to propose in guidance that states can exclude days of high concentrations of carbon-containing material from the 20% worst days. *Id.* at 26,958, n.33.

EPA should not provide such a carte blanche exemption to emissions from wildland wildfires, particularly those wildfire emissions that are due to anthropogenic activities. Specifically, it should remove the proposed rule language that states "[a] wildfire that predominantly occurs on wildland is a natural event." *Id.* at 26,969. Failing to do so would run counter to:

- The statutory definition of "manmade air pollution." As noted above, this definition includes the need to address indirect or human-influenced emissions that lead to visibility impairment. EPA's proposed definition literally defines human actions – "unauthorized activity; or accidental, human-caused actions; or a prescribed fire that has been declared to be a wildfire" – as natural. The statute clearly intends for these direct human actions to be treated as visibility-impairing pollution that can and should be remedied and prevented. Without some assurances of reasonable measures to prevent human-caused wildfires, EPA would be allowing states to be exempt from addressing an anthropogenic cause of visibility impairment which would not be consistent with the intent of the visibility protection program of the Clean Air Act, which seeks to remedy and prevent impairment from "man-made" emissions, defined as those resulting – directly or indirectly – from human activity. 42 U.S.C. § 7941(g)(3). Further, all wildfires that are ignited by natural sources, including the "lightning; volcanoes; [and] other acts of nature" discussed in the proposed definition, are at this point managed or influenced in some way by humans by way of response to such fires, e.g. through fire-fighting measures or the decision to let some fires burn.
- Common sense and basic science. It defies any common sense definition of the term "natural" to include items that are explicitly caused by humans. It is simply inaccurate to attribute all wildland wildfire emissions to natural emissions that are part of natural background conditions.
- EPA's longstanding interpretation of "existing impairment to visibility." In promulgating the 1999 Regional Haze Rule regulations, for instance, EPA noted that "fire emissions have both a natural and a manmade component. In addressing fire emissions in long-term strategies, EPA believes that States must take into account the degree to which fire emissions cause or contribute to 'manmade' visibility impairment and its contribution to

- natural background conditions. Reducing 'manmade' visibility impairment is the focus of sections 169A and 169B of the [Clean Air Act]." 64 Fed. Reg. at 35,735.
- EPA's proposed revisions to the "Exceptional Events" rule. 80 Fed. Reg. 72,840 (Nov. 20, 2015). The "exceptional events" rule lays out criteria that states need to meet if they find that a monitored exceedance of a national ambient air quality standard ("NAAQS) was due to an "exceptional event" which, if EPA concurs with the state's finding, would allow for the exclusion of that exceedance in determining whether an area was in attainment or nonattainment of a NAAQS. In that proposed rulemaking, EPA proposed to define an "exceptional event" as "an event and its resulting emissions that affect air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation, *is not reasonably controllable or preventable*, is an event caused by human activity that is unlikely to recur at a particular location or a natural event, and is determined by the Administrators in accordance with 40 CFR 50.14 to be an exceptional event...." (emphasis added). Defining all wildland wildfire as natural runs counter to this concept. 19

Moreover, defining all wildland wildfire as natural is unnecessary within the context of rule regulations. EPA's tracking metrics and guidance are a more appropriate place to consider which portion of fire represents a natural fire regime and background. EPA is not prescriptive about other sources in the context of the regulation, and there is no need to be prescriptive for wildland wildfire. This would also allow EPA and states more flexibility in how they address visibility-impairing pollutants from wildland wildfire over time, in particular as the intensity and frequency of such fires increase as the result of climate change.

Specifically, we are proposing changes to the text of the Exceptional Events Rule to indicate that:

- The not reasonably controllable or preventable criterion has two prongs, prevention and control. An air agency must demonstrate that an event was both not reasonably preventable and not reasonably controllable.
- An event is not reasonably preventable if reasonable measures to prevent the event were applied at the time of the event.
- An event is not reasonably controllable if reasonable measures to control the impact of the event on air quality were applied at the time of the event.
- The reasonableness of measures is case-specific and is to be evaluated in light of information available at the time of the event.

80 Fed. Reg. at 72,857-58.

EPA also asked for comment on clarifications to the phrase "not reasonably controllable or preventable" in the definition of "exceptional event." Specifically, EPA requested comment on requiring air agencies to demonstrate the following when claiming an exceptional event: "(1) Identify the natural and anthropogenic sources of emissions causing and contributing to the event emissions, including the contribution from local sources, (2) identify the relevant SIP or other enforceable control measures in place for these sources and the implementation status of these controls, and (3) provide evidence of effective implementation and enforcement of reasonable controls, if applicable." *Id.* at 72,861. Obviously this approach is inconsistent with automatically considering all wildland wildfire to be natural.

¹⁹ In particular, if EPA is going to define "wildfire" as including fires started by "unauthorized activity" and/or "accidental, human-caused actions," EPA should require states' regional haze plans to include requirements to prevent such wildfires. This is essentially what EPA intended in the "exceptional events" proposed rulemaking with the phrase "is not reasonably controllable or preventable." EPA elaborated on what it meant by "is not reasonably controllable or preventable:"

Finally, the proposed definition of wildland wildfire as natural precludes the consideration of control measures that would benefit ecosystems as well as short- and long-term air quality. Some of these measures are discussed more in depth below; essentially, states can and should consider measures that: reduce the incidence of accidental, unplanned, or unauthorized human-caused fire; use prescribed fire and managed responses to natural fires to promote long-term ecosystem health, thereby reducing long-term air quality impacts; and minimize short-term air quality impacts by applying best practices to prescribed fire and managed responses to natural fire. Evaluating potential measures to mitigate wildfire emissions rather than considering it to be entirely natural allows for a clear way to consider the air quality benefits of prescribed and managed fires when used as control measures. For the above reasons, EPA should remove the phrase "[a] wildfire that predominantly occurs on wildland is a natural event" from the final rule.

ii. Four factor analysis should not be limited to major or minor stationary sources or groups of sources.

Second, as discussed in Section III(B)(2), the final rule should remove reference to "major or minor stationary" source or group of sources in 51.308(f)(2)(i) in order to make sure that human-influenced sources are considered. EPA notes that its proposed provisions:

...do not necessarily require any state to 'select' wildland prescribed fire (under 51.308(f)(2)(v)) as an anthropogenic source of visibility impairment for which it must consider and analyze emission reduction measures (such as a smoke management program or basic smoke management practices) based on the four reasonable progress factors listed in 51.308(f)(2)(i).

This discussion underscores the need for clarification in 51.308(f)(2)(i) and 51.308(f)(2)(v). As currently written, there is nothing in these provisions taken together that explicitly requires states to consider emissions not due to a "potentially affected major or minor stationary source or group of sources." Prescribed fire is an example of emissions that would likely fall outside of this definition. Likewise, there is no explicit requirement in 51.308(f)(2)(v) to analyze and require emission reduction measures based on the four reasonable progress factors; it only requires states to "consider" such emissions.

EPA must ensure that states are directed and permitted to "select" sources like prescribed fire that do not fall under the definition in its proposed 51.308(f)(2)(i), and that they analyze and require emission reduction measures for such sources. Accordingly EPA should make these expectations explicit in 51.308(f)(2)(i) and 51.308(f)(2)(v) by removing the phrase "major or minor stationary source of group of sources" from 51.308(f)(2)(i) and by referencing the factors in 51.308(f)(2)(i) within the text of 51.308(f)(2)(v) (e.g. "The State must identify all anthropogenic sources of visibility impairment considered and analyzed by the State according to the factors in (f)(2)(i) in requiring emission reduction measures and developing its long-term strategy ").

iii. 40 C.F.R. § 51.308(f)(2)(vi)(E) must be simplified and made more inclusive.

Third, the proposed language in 51.308(f)(2)(vi)(E) must be significantly simplified and replaced with "Measures to mitigate the impacts of fire and dust." As proposed, the language in this section requires states to consider, as a factor in developing its long term strategy, "Basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs as currently exist within the State for these purposes." This definition is unnecessarily and uncharacteristically specific. Other portions of the regulation refer much more generically to, e.g., "stationary sources" or "construction activities" in terms of sources, and "emission reduction measures" in terms of controls. There is no need for EPA to be more specific than this in terms of fire. In fact, EPA's need here to revise the terminology used (from the existing "smoke management techniques for agricultural and forestry management purposes") because it is out-of-date highlights the need for more flexible and inclusive language in this section moving forward. 81 Fed. Reg. at 26,954. Similarly, the extensive discussion of what distinguishes techniques, plans, programs, and practices are much more appropriately situation in EPA's guidance; to wit, much of the discussion in the rule preamble appears verbatim in the guidance.

Broader language in 51.308(f)(2)(vi)(E) would also allow for consideration of measures to address all types of fire. EPA's proposal currently only discusses the impacts of prescribed fire and wildfire on wildlands. As discussed generally above, fire from many other sources and locations can impact Class I areas. In particular, agricultural burning has significant impacts on some Class I areas, and is clearly human-caused. We believe that consideration of best practices for other types of fire is also appropriate.

This specificity also discourages and fails to require the consideration of additional control measures that could further reduce emissions. In particular, the proposed rule only requires consideration of "basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs as currently exist within the state for these purposes." EPA explicitly states that it does not intend to "require regional haze SIPs to include measures to limit emissions from prescribed fire." 81 Fed. Reg. at 26,958-59. Ruling out review of and improvement upon these elements is contrary to the statute (which does not limit the controls to be considered under the reasonable progress

²⁰ While our discussion here focuses primarily on fire, dust is another example of a human-influenced source. The regulations should include a specific provision for states to consider dust so that it is clear that 100% of dust cannot be considered natural, as Texas attempted to do in its SIP. This approach was rejected by EPA in its FIP for Texas. *See* 81 Fed. Reg. at 300, 325.

²¹ If EPA is concerned that this could inappropriately imply that natural sources should be considered, 51.308(f)(2)(vi)(E) could alternatively read "Measures to mitigate the impacts of *human-influenced* fire and dust," or, in line with the statutory terminology, "Measures to mitigate the impacts of fire and dust *resulting directly or indirectly from human activity.*" Similarly, if EPA is concerned that a broader approach would lead states to avoid considering the specific programs and practices currently in the proposed language, EPA could instead make clear that the consideration of control measures for fire are not limited to those listed by modifying the language (subject to our additional suggestions below) to read "Basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes, and smoke management programs as currently exist within the State for these purposes, and other measures to mitigate the impact of fire and dust."

analysis) and arbitrary in terms of the potential progress that can be made. This leaves an unnecessary void that could readily be filled by controls measures, including those discussed below, that are available to states and land managers to protect visibility, promote robust ecosystems, and safeguard public health.

If EPA includes the proposed language in the final rule, either with or without a broader consideration of fire, we have several suggestions that would strengthen the proposed language. First, the word "basic" should be eliminated. This unnecessarily limits the scope of practices that states should consider. There is no reason to limit consideration to basic or existing practices; states should at least consider if not apply best practices and can capably do so. Moreover, where alternatives to prescribed fire are available, the state should be required to consider those as well. For example, in some places, mechanical methods for disposing of crop residue have replaced agricultural field burning. *Id*.

Second, smoke management programs should be considered and should be required to explicitly address both short- and long-term air quality impacts in Class I areas, including the need for and the potential costs and benefits of prescribed and managed fire, regardless of whether such programs currently exist in the state. In particular, this would provide the benefit of provisions for periodic program evaluation. *See* 81 Fed. Reg. at 26,959. The sum of these recommendations would read:

Smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes, and smoke management programs that address short- and long-term impacts to visibility in mandatory Federal Class I areas.

3. An adjustment to the uniform rate of progress for prescribed fire is appropriate only if the four statutory factors have been considered.

EPA proposes to allow states with Class I areas significantly impacted by wildland prescribed fire to adjust the URP with approval from the Administrator if basic smoke management practices are being applied. 81 Fed. Reg. at 26,959. We support the intention not to punish states for the use of a tool that ultimately can help to minimize air quality impacts, and which, though human-caused, in fact can help return natural levels of fire. However, states should be required to apply the four statutory factors to prescribed fire before making any accommodation. In requiring only the application of "basic smoke management practices," EPA's proposed language conflicts with the statutory requirement to consider all of the reasonable progress factors. 81 Fed. Reg. at 26,972. As with the language in 51.308(f)(2)(vi)(E), this language is too prescriptive and doesn't allow the necessary flexibility to require available control measures beyond an undefined set of basic practices. Applying the four factors to prescribed fire would also provide a clear, statutorily-consistent space to consider ecosystem and other public welfare benefits of prescribed fire, i.e. as a "nonair quality environmental impact." 42 U.S.C. § 7491(g)(1). In the final rule, 40 C.F.R. § 51.308(f)(1)(vi)(B) should read "... and/or to preserve endangered or threatened species during which appropriate

²² See, e.g., http://www.ecy.wa.gov/programs/air/aginfo/research_pdf_files/AlternativesAgBurn.pdf.

basic smoke management practices were applied, provided that the State has analyzed and required controls for these sources according to the four factors in paragraph (f)(2)(i) of this section."²³

Given the complexity of the issue and need for mitigation of emissions related to fire, we request EPA to issue guidance for states and Federal Land Managers to chart a clear and collaborative course detailing requirements for a proper four factor analysis and balancing such requirements with the value of prescribed burns.

We agree that the Administrator could approve such adjustments if there are sufficient and scientifically valid data and methods clearly demonstrating the specific impact of wildland prescribed fire. Alternately, rather than adjusting the URP, the process could simply exempt a state from the additional demonstration in 51.308(f)(3)(ii) with respect to prescribed burns. In either case, the adjustment or exemption should not be indefinite but instead should be requested in each planning period. Finally, it should be clear in the final rule that the state's request is part of, not separate from, the SIP process, and that the Administrator's approval of any such adjustment is subject to public review. To make this adjustment, the final rule should read, "As part of an implementation plan revision, tThe State may submit a request to the Administrator"

4. Enforceability of fire control measures

Although the regulations do not speak to the enforceability of fire control measures directly, EPA's preamble addresses this topic with regard to smoke management practices and programs, and suggests that smoke management practices do not necessarily need to be enforceable. 81 Fed. Reg. at 26,958-59. We oppose this: any fire control measures, including smoke management practices and programs, must be included as enforceable parts of the SIP.

Failing to make these enforceable would be contrary to the statutory language which requires implementation plans to include "emission limits, schedules of compliance, and other measures as may be necessary to make reasonable progress toward meeting the national goal." 42 U.S.C. § 7491(a)(1). Clearly, Congress intended for the measures required to make reasonable progress to be enforceable.

Similarly, regional haze SIPs are required to include measures relied upon both to the remedy existing impairment and to prevent future impairment of visibility. 40 C.F.R. § 51.300(a), (b). Smoke management plans, as well as authorization to burn rules, other open burning restrictions, and fire prevention measures such as those discussed in the above section, have historically been and should continue to be an important component of SIPs to prevent future visibility impairment and/or to address existing visibility impairment. Such smoke management practices and programs and authorization to burn requirements apply to more than just prescribed fires for forest management; the plans also typically apply to agricultural burning as well as other types of open burning, all of which can impact visibility in a Class I area as well

²³ We assume that EPA could and would provide guidance on appropriate application of the four factors with regard to prescribed fire.

as public health. EPA must continue to require such smoke management practices and programs and other rules related to the minimization of impacts of burning and fire prevention measures to be part of the federally enforceable SIP.

It appears that EPA may be concerned with smoke management practices being so prescriptive that they inhibit prescribed burning which is often necessary to minimize the possibility of large wildfires, and the air quality impacts thereof. 81 Fed. Reg. at 26,958-59. However, rather than not requiring such approaches to be part of the SIP, EPA should instead allow flexibility to accommodate emergency situations, such as options for emergency provisions allowing land managers to take quick action for prescribed burns if necessary (e.g. setting a backfire to prevent a wildfire from encroaching in an area).

By requiring a control measure to be made part of the SIP, it is required that public notice and the opportunity for public comment be provided, that the measure be enforceable, and that EPA review and approve the measure as providing the necessary protections for visibility protection. Upon EPA approval, the implementation plan and measures included therein become federally enforceable. These requirements and the effect of SIP approval help to ensure that the control measures will be consistently followed and complied with. When smoke management and related requirements are made part of the SIP, the requirements cannot be changed without going through public notice and comment and SIP revision, which further ensures consistent application, more familiarity with the requirements by affected parties, and more consistent compliance.

Given the importance of smoke management practices and programs, open burning regulations and permits to burn, and fire prevention measures in preventing future visibility impairment as well as in potentially addressing existing visibility impairment, EPA must continue to require that all such measures to reduce smoke from burning and wildfires be part of the SIP.

5. Fire control measures are available.

There are numerous potential control measures for fire beyond the basic smoke management practices and existing smoke management programs contemplated by EPA's proposed regulation. We discuss some of them here to provide examples of the types of controls that EPA would fail to require and likely would unnecessarily and unintentionally discourage if the changes suggested above are not made. Further discussion of these and control measures that are available to minimize human-influenced dust are included in our comments on EPA's proposed guidance.

Human-caused wildfire, whether accidental or resulting from unauthorized activity, is one category of fire to which control measures can be applied. The National Park Service estimates that "as many as 90% of the wildland fires in the United States are caused by humans," which can be started by cigarettes, lawn mowers and other equipment, campfires,

32

²⁴ https://www.nps.gov/fire/wildland-fire/learning-center/fire-in-depth/wildfire-causes.cfm; see also National Interagency Fire Center statistics, https://www.nifc.gov/fireInfo/fireInfo stats lightng-human.html. We note that the proportion of human versus lightning caused fires varies considerably by region.

target shooting, fireworks, vehicles, debris burning and other sources of heat or sparks. Human-caused wildfire reduces the ability to manage fire via more controlled methods, i.e. prescribed fire, in ways that would minimize impacts to air quality.

There are many measures that could and should be considered as part of a state's regional haze plan to prevent human-caused wildfires. For example, in states where wildfire emissions are a significant component of visibility impairment, EPA should require each state to have open burning regulations as part of its long term strategy. Such programs should include permits or some sort of authorization to burn for agricultural or slash burning, to ensure good dispersion of air quality and also to ensure that weather conditions are not likely to allow such open burning to burn out of control. Such states should also include provisions in their regional haze SIPs requiring the state and/or local governments to impose campfire bans, fireworks bans, and bans on other accidental causes of wildfire such as exploding targets in times of high or worse fire danger. Exploding targets have been deemed the cause of numerous human-caused, accidental wildfires in recent years.²⁵

While there are some states that have and do take measures to ban campfires, fireworks, and/or exploding targets as necessary to prevent wildfires, there are also examples of states that do not impose restrictions to prevent accidental, human-caused wildfires even when wildfire risk is high. For example, in 2015, the state of Washington banned campfires in state parks, ocean beaches, and in some national parks and national forests due to high levels of drought and fire-danger. However, the Michigan Department of Natural Resources declined to impose a campfire ban in May of 2016 despite high fire conditions in northern Michigan. ²⁷

EPA's proposed definition of wildfire would also consider wildfires due to "unauthorized activity" to be considered natural events. Unauthorized, human-caused wildfires presumably refer to situations where regulations are in place prohibiting an activity but those regulations were not complied with. For example, a person conducts an unauthorized land-clearing burn in a state with an open burning program that requires air permits and/or clearance from the state or local air quality agency to conduct open burning, such as for agricultural land clearing.

Assuming that EPA is referring to wildfires that occur in such cases where applicable law or rules are not being complied with, states should include in their haze SIPs provisions for education, enforcement, and penalties for noncompliance. Clear enforcement provisions in such programs designed to either prevent open burning during times of bad dispersion or to prevent potential causes of wildfire are necessary to ensure those requirements are complied with. Such programs should also have a public information component, to ensure that those that may be

²⁶ See, e.g., "Campfire deprived? This is your weekend, as many campfire bans are lifted," The Seattle Times, September 10, 2015, http://www.seattletimes.com/life/travel/campfire-deprived-this-is-your-weekend-as-many-campfire-bans-are-lifted/.

²⁵ See "Exploding targets, an increasing wildfire problem," Wildfire Today, October 11, 2012, http://wildfiretoday.com/2012/10/11/exploding-targets-an-increasing-wildfire-problem/.

²⁷ See, e.g., "Campfires OK, despite extreme fire conditions, [Michigan] DNR officials say," May 24, 2016, MLive, http://www.mlive.com/news/bay-city/index.ssf/2016/05/campfires ok despite extreme f.html. According to this story, Michigan has no law against using pyrotechnics outdoors, even in times of high fire danger.

regulated by an open burning program are aware of the requirements and the consequences for not complying. Strong compliance requirements and public notification of repercussions for unauthorized actions will help to ensure that such human-caused wildfires are less likely to recur.

As noted above, wildfires are increasing in both frequency and intensity. Both prescribed fire and managed fire, or planned responses to unplanned fire, are proven methods for mitigating wildfire emissions and reducing fire severity (Collins et al. 2007; Hurteau et al. 2008), and should be evaluated as such when states consider measures to reduce wildfire emissions. The proposal only requires consideration of basic practices and existing programs, but these can and should be improved upon. States should consider best practices for minimizing the immediate impacts of prescribed and managed wildfire in the short term and for using these tools to minimize the long-term impacts of wildfire. This approach is particularly appropriate given the long-term view of the Regional Haze Rule, and these measures should be included as SIP provisions.

Prescribed fire allows land managers and air quality regulators to manage the timing, extent, and amount of smoke emissions, ²⁸ and thus to balance and minimize short- and long-term air quality impacts. Prescribed fire reduces emissions from fires on a per hectare basis. Wildfires typically occur when conditions are hot and dry, which results in more complete combustion of biomass compared to prescribed fires, which burn during more desirable conditions. This leads to more air pollution from a wildfire compared to a prescribed fire in the same area; this increased smoke also is more likely to occur during times when air is more stagnated and less likely to be dispersed by high altitude winds. ²⁹

Prescribed fire and managed fire can help prevent and mitigate the significant air quality impacts associated with unplanned, high intensity wildfires,³⁰ in part by providing 'fuel breaks' to help prevent the spread of larger (more polluting) mega-fires in the future.³¹ Coordinated, advance planning that prioritizes areas that will be allowed to burn when unplanned ignitions occur, based on considerations including impacts to air quality, allows for more comprehensive and strategic management of fire to reduce both short- and long-term air quality impacts of fire. These are examples of the types of control measures that the final rule should be modified to ensure that states consider when examining ways to minimize short- and long-term emissions from fire sources.

²

²⁸ Engel, K.H. 2013. Perverse Incentives: The Case of Wildfire Smoke Regulation. *Ecological Law Quarterly* Vol. 40:623 University of California; Cisneros, R., Schweizer, D., Preisler, H., Bennett, D.H., Shaw, G., Bytnerowicz, A. 2014. Spatial and seasonal patterns of particulate matter less than 2.5 microns in the Sierra Nevada Mountains, California. *Atmospheric Pollution Research* 5 (2014) 581-590.

²⁹ Engel, K.H. 2013. Perverse Incentives: The Case of Wildfire Smoke Regulation. *Ecological Law Quarterly* Vol. 40:623 University of California.

³⁰ Collins, B.M., Kelly, M., van Wagtendonk, J.W., Stephens, S.L., 2007. Spatial patterns of large natural fires in Sierra Nevada wilderness areas. *Landscape Ecology* 22, 545–557; Hurteau, M.D., Koch, G.W., Hungate, B.A., 2008. Carbon protection and fire risk reduction: Toward a full accounting of forest carbon offsets. *Frontiers in Ecology and the Environment* 6, 493–498; Cisneros, R., Schweizer, D., Preisler, H., Bennett, D.H., Shaw, G., Bytnerowicz, A. 2014. Spatial and seasonal patterns of particulate matter less than 2.5 microns in the Sierra Nevada Mountains, California. *Atmospheric Pollution Research* 5 (2014) 581-590.

³¹ Miller, C. 2012. The hidden consequences of fire suppression. *Park Science* 28:3 Winter 2011-2012.

E. <u>EPA's Proposal to Adjust the Uniform Rate of Progress to Account for the Influence of International Emissions is Premature and Likely to Result in an Offramp from Measures to Make Reasonable Progress.</u>

EPA requests comment on a proposed provision that would allow states with Class I areas significantly impacted by international emissions to account for the impact of those emissions for the purposes of determining the Uniform Rate of Progress. 81 Fed. Reg. at 26,956. EPA correctly recognizes states that international impacts cannot be estimated with sufficient accuracy at this time, but nonetheless proposes two types of adjustments. First, EPA proposes to allow the Administrator to approve a state adjustment to the URP, provided that the state provides a scientifically valid estimate of international emissions. Alternatively, EPA suggests recalculating the URP by either (1) adding the value of international emissions to natural visibility conditions, or (2) removing the impact of international emissions from both the 2000-2004 baseline natural visibility and current conditions for any projected reasonable progress goals. *Id.* at 26,956, n.29.

The Conservation Organizations recognize that addressing international emissions can be complex. We also recognize that, in some circumstances, it may be difficult to meet the rate of progress necessary to attain natural visibility conditions by 2064, due in part to the impact from international emissions. As such, we support EPA's policy objectives and encourage states and the agency to engage in mitigation of international pollution. However, we have three significant concerns about EPA's proposal to adjust the reasonable progress goal framework to account for international emissions.

First, EPA's proposal to effectively remove anthropogenic international emissions from the reasonable progress inquiry is inconsistent with the plain language of the Clean Air Act. In enacting the visibility provisions of the Clean Air Act, Congress established as the national goal "the prevention of *any* future, and remedying of *any* existing, impairment of visibility in mandatory class I Federal areas which impairment results from man-made air pollution." 42 U.S.C. § 7491(a)(1) (emphasis added). Given Congress's use of the "broad" and "expansive" term "any" man-made pollution, the reduction of emissions from international sources must still be part of the overall national goal. *Ali*, 552 U.S. at 218-19. As EPA has recognized, both the states and EPA have a duty to work together to take appropriate action to address international emissions through available mechanisms. 64 Fed. Reg. at 35,755 ("The States retain a duty to work with EPA in helping the Federal government use appropriate means to address international pollution transport concerns."). EPA must make clear that its proposed adjustment does not minimize or eliminate that obligation, and that international emissions are not a basis for failing to conduct an appropriate determination of reasonable progress according to the statutory factors.

Second, EPA's proposed "adjustment" to the reasonable progress goal framework is both internally inconsistent and inconsistent with other EPA rulemakings. Indeed, in the proposal itself, EPA recognizes that the "explicit consideration of impacts from anthropogenic sources outside the U.S." will "not actually affect the conclusions that states should make about what emission controls for their own sources are needed for reasonable progress." 81 Fed. Reg. at

26,956. Similarly, EPA has repeatedly recognized that consideration of impacts from international anthropogenic sources should have no bearing on a particular state's evaluation of which controls are necessary to make reasonable progress. *See, e.g.*, 64 Fed. Reg. 35,714, 35,755 (July 1, 1999) ("The States should not consider the presence of emissions from foreign sources as a reason not to strive to ensure reasonable progress in reducing any visibility impairment caused by sources located within their jurisdiction); 81 Fed. Reg. at 343 (international emissions "do[] not in any way relieve" the states of the obligation to conduct an appropriate determination of reasonable progress according to the statutory factors).

Nevertheless, EPA suggests that an adjustment may affect whether a state is required under proposed section 51.308(f)(3)(ii) to demonstrate that "there are not additional emission reduction measures needed for reasonable progress." 81 Fed. Reg. at 26,956. That language, when read together with the proposed adjustment clause, suggests that states can avoid a robust evaluation of reasonable progress controls if the state makes a yet-to-be defined showing that international emissions make such controls unreasonable. As a result, the preamble language effectively creates an opt-out that is internally inconsistent and contrary to the statute. Indeed, EPA's reasoning for including an adjustment clause cannot be reconciled with its statement that international emissions will "not actually affect" the reasonable progress analysis. *Id.* To avoid any suggestion to the contrary, EPA must make clear in the text of the rule revision that international emissions are not a basis for failing to appropriately determine, in the first instance, the emission reductions necessary to make reasonable progress. In particular, we suggest that EPA include the following language in italics in the first and last sentences of section 51.308(f)(1)(vi)(B):

Provided that the state first conducts the analysis required under section (f)(2)(i), the State may submit a request to the Administrator seeking an adjustment to the uniform rate of progress for a mandatory Class I Federal area to account for impacts from (1) anthropogenic sources outside the United States If the Administrator determines that the state has satisfied the requirements of section (f)(2)(i), and has estimated the impacts from anthropogenic sources outside the United States or wildland prescribed fires using scientifically valid data and methods, the Administrator may approve the proposed adjustment to the uniform rate of progress for use in the State's implementation plan, provided that the State's demonstration shows that the State would achieve the uniform rate of progress but for manmade emissions emanating from outside the United States. [32] The adjustment may be no greater than is justified by the specific international contributions quantified by the state using scientifically valid data and methods approved by the Administrator.

Third, even with this proposed change, we have serious concerns that EPA's proposed adjustment is premature. The proposed adjustment also encourages states and sources to expend valuable resources developing scientifically questionable data and methodologies prior to EPA weighing in with an opinion as to the merit of the chosen data and methods. As EPA recognizes

³² Similar language appears in 42 U.S.C. § 7509a providing for adjustments in certain requirements for nonattainment areas impacted by international emissions.

in the proposed rule, such impacts cannot be estimated with sufficient accuracy at this time, in part due to great uncertainty about past, present and future emissions from sources in most other countries. 81 Fed. Reg. at 26,956.

EPA has recognized in other haze rulemakings that states and sources routinely argue that as the impact of international emissions increases, the relative impact of in-state sources (and thus, the need for reasonable progress control analysis) decreases. *See, e.g.*, Texas Haze FIP, EPA Response to Comments at 830. In other words, if natural visibility conditions are worse at a Class I area due to international emissions, these states and sources may seize on that fact to argue (without technical justification)³³ that requiring additional controls on in-state sources would be less reasonable. *Id.* Although EPA attempts to constrain the consideration of international emissions to the URP process, it is likely that some states and sources would continue to use this to argue that in-state sources are less important in light of international emissions. EPA's proposal is a recipe for abuse, given some states' willingness to use international emissions to justify not requiring reasonable controls on in-state sources and the current inability to accurately estimate international emissions. EPA's proposal will likely be used by some states as an offramp to avoid measures necessary to make reasonable progress.

Rather than prematurely including an adjustment clause in the rule itself, EPA should work with states, stakeholders, and other countries to develop scientifically valid methods resting on reliable data entrenched in a guidance document that can be consistently applied across all states to evaluate the impacts of international emissions.

Additionally, EPA's proposed rule does not strike the balance the agency seeks to achieve. If states are given the leeway EPA proposes, states may manipulate the natural conditions calculation to avoid addressing their share of visibility impairment (i.e., to avoid a demonstration under 51.308(f)(3)(ii)). To avoid this scenario, if EPA finalizes its proposed adjustment provision, it should first specify via a guidance document the data and methods by which a state may permissibly account for international pollution. Moreover, where a state accounts for international pollution in identifying its reasonable progress goals, EPA must require that the state model the relative percentage of visibility impairment caused by in-state sources to afford a full and fair depiction of emissions impacting the Class I area/s.³⁴

_

³³ In a similar context, the Ninth Circuit found that California's claim that violations of clean air health standards in a border county were due to emissions from Mexico was not supported by the record. *Sierra Club v. EPA*, 346 F.3d 955 (9th Cir. 2003).

³⁴ Aside from our concerns about the proposed URP adjustment, we urge EPA to exercise its existing authority to address international emissions. We also urge EPA to clarify that the affected states also have an obligation to take appropriate action to address international emissions. 64 Fed. Reg. at 35,755 ("The States retain a duty to work with EPA in helping the Federal government use appropriate means to address international pollution transport concerns."). Although EPA and the states are not required to "compensate" for international emissions, it is well within EPA and the states' rights to formally request reductions from international sources where appropriate, or to take permitting actions in the United States that will lead to emission reductions in in other countries.

For example, Mexico's Carbon I and II power plants, which are less than twenty miles from the Texas border, are responsible for significant levels of pollution across several of the border states. EPA has authority to reject recent Texas water discharge and mining permits to a coal mine in Maverick County, which would prevent the Mexican company Dos Republicas from mining high-sulfur coal that will be transported and burned at the Carbon I & II

F. Progress Reports

1. Changes to the content of progress reports

Mid-planning period progress reports are intended to provide stakeholders with a summary of how SIPs are being implemented, the effect that implementation has had, and the resulting changes in both visibility impairment and visibility conditions. Additionally, if conditions have changed unexpectedly or elements of the SIP have not been implemented, progress reports offer an opportunity to adjust the SIP without waiting years until the next periodic comprehensive SIP revision. While many of EPA's proposed changes to progress reports are improvements, modifications are needed to make sure that updated information about visibility conditions and emissions are included regardless of the submittal date of the progress report, that reductions are implemented and enforceable, and that unanticipated increases or lack of decreases in emissions of visibility impairing pollutants are addressed in a timely manner.

EPA proposes to make changes to 40 C.F.R. § 51.308(g)(3) to clarify what is meant by "current visibility conditions." We agree with the intent of this change and agree that it is important for this term to be clarified, particularly given the misconception by some states that the term refers to every five years after the baseline period (e.g., New Mexico's 2014 progress report submittal used 2005-2009 to represent current conditions). However, given the historic delays in submittals of SIPs and progress reports, the final rule language should be amended to anticipate the potential for progress reports submitted after the required date. Specifically, the final rule text should read, "The period for calculating current visibility conditions is the most recent 5-year period preceding the required date **or submittal date** of the progress report, whichever is later, for which data are available as of a date 6 months preceding the required date **or submittal date** of the progress report, whichever is later."

EPA proposes to remove the reference to the "past 5 years" in 40 C.F.R. § 51.308(g)(3)(iii), (g)(4), and (g)(5), and to instead require information developed over the period since the period addressed in the most recent periodic comprehensive revision. We support this change because it is important for stakeholders to be able to assess all relevant years.

EPA proposes to make changes to 40 C.F.R. § 51.308(g)(4) to clarify what is meant by the most recent emissions inventory. We agree with the requirement for emissions from all sources to be updated at least through the most recent information submitted by the state to the EPA for the National Emissions Inventory, and for more recent information to be reported for sources which report more frequently to EPA (*e.g.*, EGUs). The final rule should also require the use of "any more recent data available" for all states, given that there are, in some cases, more recent inventories available at the state or regional level. If there are changes to emission estimation procedures that impact these inventories, for public understanding and transparency,

facilities. EPA is also in the process of issuing an Environmental Impact Statement ("EIS") that would allow the Texas mine to operate.

³⁵ New Mexico Progress Report for the State Implementation Plan for Regional Haze, March 11, 2014, p. 3.

the final rule should require the state to include an assessment of the nature and impact of these changes, rather than simply allowing states to include this information.

We support the proposed changes to 40 C.F.R. § 51.308(g)(5) to require states to discuss whether changes in anthropogenic emissions that have occurred since the last planning period were anticipated by the last periodic comprehensive revision. The changes will significantly increase transparency and the stakeholder's ability to make sense of what is reported in the progress report as compared to the previous SIP, and as EPA notes, this is not a significant burden to the states to include. It appears that EPA's proposed changes also modify 40 C.F.R. § 51.308(g)(5) to require states to report on all significant changes in anthropogenic emissions, whereas the previous version only required attention to changes that impeded visibility progress. We support this change because it is helpful to understand all the anthropogenic changes that have occurred, both positive and negative. Additionally, we encourage EPA to remove the word "significant" from 40 C.F.R. § 51.308(g)(5) so that there is no question as to the threshold changes must meet to be reported on, and stakeholders can be confident that they are seeing the full picture.

Finally, the rule should also require states to include two other types of information in 40 C.F.R. \S 51.308(g)(5). For increases in visibility impairing pollutants, the state should include what it is doing to address emissions from those sources and ensure no further increases occur, and whether such steps are enforceable. For decreases in visibility impairing pollutants, the state should include whether or not those decreases are enforceable, and if they are not, what the state is doing to make sure the decreases continue. As we have seen with recent increases in NO_x emissions from power plants equipped with selective catalytic reduction, ³⁶ the technical ability of a facility to limit its emissions does not mean that it will do so, unless it is required to do so. The same is true for shutdowns of facilities that nevertheless retain their technical ability and permits to operate. This information will allow stakeholders to gauge whether or not the existing reductions can be counted on in the future.

The final rule should also require the same information as a part of or in conjunction with 40 C.F.R. § 51.308(g)(2), which currently requires a summary of emission reductions achieved through the implementation of the SIP. It would be very useful for stakeholders to know which of those reductions were anticipated by the SIP, and for progress reports to explicitly compare assumptions in the SIP to emission reductions achieved – both in general, as required in 40 C.F.R. § 51.308(g)(5), and specific to those changes that result from SIP implementation, as discussed in 40 C.F.R. § 51.308(g)(2). In other words, stakeholders should be able to clearly identify whether SIP implementation is resulting in anticipated reductions – not just overall, but with regard to each specific sector, group of sources, or facility. Thus far, progress reports have sometimes lacked this level of specificity. Also, EPA should make clear that reductions in one category or source, particularly those that are not enforceable, do not make permissible or compensate for a failure to implement previously determined reasonable progress measures from another category or source. This is discussed further below.

 $^{^{36}}$ Thomas F. McNevin (2016), Recent increases in nitrogen oxide (NO_x) emissions from coal-fired electric generating units equipped with selective catalytic reduction, Journal of the Air & Waste Management Association, 66:1, 66-75, DOI: 10.1080/10962247.2015.1112317

Specifically, EPA should modify 40 C.F.R. § 51.308(g)(1), (g)(2), and (g)(5) as follows:

- (1) A description of the status of implementation of **each and** all measures included in the implementation plan for achieving reasonable progress goals for mandatory Class I Federal areas both within and outside the State.
- (2) A summary description of the emission reductions achieved at sources or groups of sources throughout the State through the implementation of the measures described in paragraph (g)(1) of this section.
- (3) ****
- (4) ***
- (5) An assessment of any significant changes in anthropogenic emissions, including those resulting from the measures described in paragraph (g)(1) of this section, within or outside the State that have occurred since the period addressed in the most recent plan required under paragraph (f) of this section including whether or not these changes in anthropogenic emissions were anticipated in that most recent plan and whether they have limited or impeded progress in reducing pollutant emissions and improving visibility. The State should describe the measures it is taking to address any unanticipated increases in anthropogenic emissions and whether those measures are enforceable. The State should describe whether any unanticipated decreases in anthropogenic emissions are enforceable and how it is ensuring such decreases are maintained.

The new proposed 40 C.F.R. § 51.308(g)(6) requires states whose long-term strategy includes a smoke management program for prescribed fires on wildland to include a summary of its most recent assessment of that program, including whether the program is meeting its goals of "improving ecosystem health and reducing the damaging effects of catastrophic fire." 81 Fed. Reg. at 26,961. We agree with the inclusion of this provision, however, the final rule should also include specific consideration of whether the program is reducing both short- and long-term air quality impacts from prescribed fire and human-caused wildfire. If the program does not include explicit goals for this, the program should be modified such that it explicitly considers these goals.

EPA proposes to eliminate the existing 40 C.F.R. § 51.308(g)(7), which requires review of the state's visibility monitoring network, because all states rely on their participation in IMPROVE for their visibility monitoring. While we appreciate EPA's desire to reduce states' reporting burden, we believe this is still an appropriate provision to ensure stakeholders are made aware of any changes in visibility monitoring. The final rule should maintain the existing 40 C.F.R. § 51.308(g)(7) to ensure stakeholders are kept apprised of any changes in visibility monitoring relevant to Class I areas in its state, and to provide for continuing reassessment of the adequacy of the monitoring network to characterize visibility impacts in specific Class I areas. This requirement is appropriate given state reliance on IMPROVE and the relatively few changes from the previous planning period.

We support EPA's proposal to remove the word "negative" from 40 C.F.R. § 51.308(h)(1) to clarify that the declaration involves identifying that the existing SIP is sufficient

to achieve established goals for visibility improvement and emission reductions. EPA should also clarify that the goals for emission reductions that must be met are not the overall or statewide goals for individual pollutants, but the specific goals established for individual sources or groups of sources as they relate to visibility impairment at specific Class I areas. Failure to meet emission reduction requirements from a source or group of sources cannot be "balanced" by emission reductions from another source, especially reductions that are not enforceable. This should be emphasized by modifying 40 C.F.R. § 51.308(h)(1) to read ". . . in order to achieve established goals for visibility improvement and emissions reductions **from sources or groups of sources**"

EPA should also modify 40 C.F.R. § 51.308(h)(2)-(4) to include the same language that currently exists in 40 C.F.R. § 51.308(h)(1), along with the modification above, pertaining to meeting "established goals for visibility improvement **and emissions reductions from sources or groups of sources**" to clarify that simply meeting reasonable progress goals in terms of visibility conditions is not sufficient unto itself. This is in line with the process of establishing emission reduction measures first, and then setting visibility goals that reflect those measures, that is followed in periodic comprehensive revisions. Meeting specific visibility conditions may be due to a host of factors, not all of which reflect enforceable reductions in visibility impairing pollution and adequate progress in terms of SIP implementation. This clarification would also preclude arguments that we have seen, *e.g.* in Texas and elsewhere, that current visibility conditions that meet reasonable progress goals imply that there is no longer a need for controls that have been identified as reasonable.

As noted elsewhere, if progress reports are no longer required as SIP revisions, we support including the standalone requirement for FLM review of progress reports in 40 C.F.R. § 51.308(i) and additional language delineating an affirmative EPA obligation to review and act on each submitted progress report.

2. EPA should retain the requirement that states submit progress reports as SIP revisions.

We oppose EPA's proposal to remove the requirement that progress reports be submitted as SIP revisions. We recognize that the SIP process requires additional administrative steps and for some states an added legislative component. However, requiring progress reports as SIP revisions provides for definite EPA action, more meaningful public participation, and the opportunity for timely mid-course correction.

Under the existing requirements, a state's submission of a progress report triggers several EPA obligations and public rights. EPA is required to review the report, propose approval or disapproval of the report, publish its proposal in the Federal Register, take public comment, and finalize its approval or disapproval within 18 months of submission. 42 U.S.C. § 7410(k); 40 C.F.R. §§ 51.100-05. This process makes clear three elements: (1) whether the state's submittal appropriately addresses the information requirements in 40 C.F.R. § 51.308(g); (2) whether the state is complying with its implementation commitments under the most recent periodic comprehensive revision; and (3) whether or not the most recent periodic comprehensive revision is adequate as established under 40 C.F.R. § 51.308(h). Stakeholders, including states with Class I areas affected by interstate pollution, are afforded the opportunity to provide input during the

public comment period, *see* 5 U.S.C. § 553, 42 U.S.C. § 7607(d); to challenge the agency's decision to approve or disapprove the SIP submission, *see* 42 U.S.C. § 7607(b)(1); and to petition the agency to take action if EPA fails to do so within the allotted time, *see id.* § 7604(a)(2).

If a state fails to submit a progress report required as a SIP revision, EPA has a non-discretionary duty to make a determination stating that the minimum criteria for administrative completeness under U.S.C. § 7410(k)(1) have not been met, known as a finding of failure to submit, within six months of the relevant deadline. This finding then triggers an obligation for EPA to promulgate a FIP within two years after the finding. *Id.* § 7410(c)(1)(A). If EPA fails to perform either of these duties, stakeholders have clear legal recourse. The FIP is then subject to the same federal notice and comment procedures described above.

EPA is also provided clear recourse in this process, and states are aware of the potential consequences of failure to comply with requirements. In its final 1999 rule, EPA specifically recognized the importance of the authorities associated with requiring progress reports as SIP revisions:

If EPA finds that the State has not been implementing certain measures adopted into its SIP, or that the State has submitted a SIP that is not approvable, or that the State has failed to submit any required progress report or SIP revision at all, the State could be subject to sanctions in accordance with sections 179(b) and 110(m) of the CAA. If the State does not resolve the situation expeditiously, EPA may be obligated to take further appropriate action to resolve the situation, including promulgation of a FIP within 2 years in accordance with section 110(c) of the CAA . . . The EPA will exercise its FIP authority as appropriate and necessary to ensure that States fulfill their obligations such that Class I areas make reasonable progress toward the national visibility goal.

64 Fed. Reg. at 35,747. Requiring progress reports as SIP revisions thus provides certainty in terms of process requirements, timeline, and potential remedies, whether or not the progress report is submitted.

Removing the requirement to submit progress reports as SIP revisions removes these benefits. EPA notes that it would still have the discretion to determine that the haze SIP is inadequate, relying in part on the basis of information in the progress report, and that this discretion would trigger a remedy in the form of a SIP call under 42 U.S.C. § 7410(k)(5). This process, however, is a highly uncertain prolonged and inefficient way to address these inadequacies. EPA very rarely issues SIP calls, even where clearly warranted. The agency claims a high degree of discretion in deciding whether to do so. With the proposal to remove the SIP process also comes additional delays in accounting for the progress made and any corrections needed. If the state submits a progress report, EPA no longer has a non-discretionary duty to approve or disapprove the report.

Stakeholders would then have to evaluate the report itself, including its implications for the implementation and adequacy of the most recent periodic comprehensive revision, rather than respond to expertise and insight represented by EPA's proposed determination. If stakeholders believe the progress report itself is inadequate or that it supports the conclusion that the most recent periodic comprehensive revision is inadequate, they have no immediate ability to compel EPA to act, aside from encouraging EPA to exercise its discretion to act. Because 42 U.S.C. § 7410(k)(5) applies only to SIPs, challenging a progress report would entail reaching into the periodic comprehensive SIPs containing the progress report commitment to trigger any obligation related to the progress report itself. Such a process would be far less targeted and lengthier than maintaining the current options under the SIP revision process.

Likewise, if a state does not submit a progress report, EPA would no longer have a nondiscretionary duty to issue a finding of failure to submit. Although stakeholders would have the ability to enforce a SIP requirement that a state submit progress reports (as EPA proposes to include in the periodic comprehensive revision requirements), that process is not a substitute for compelling EPA to issue a finding of failure to submit and thus start a certain, two-year deadline for a FIP to be completed. A requirement that the SIP commit to submission of progress reports does not include the important oversight provided by mandatory EPA review and approval/disapproval of such reports, and for follow up with a mandatory FIP if the state fails to timely correct deficient reports. EPA believes that progress reports do not warrant the requirement for EPA to have to prepare a report within two years of a finding of failure to submit, and notes that it could undertake a "less formal assessment" if a state fails to submit. This does a disservice to the purpose of a progress report, which is to serve as a mid-course correction in a planning period which is already a decade long. We strongly recommend that EPA maintain the current requirement for progress reports to be submitted as SIP revisions. Should EPA fail to do so, EPA should build in an affirmative obligation for the agency to assess, and correct as needed, each state's progress report. This is discussed further below.

Removing EPA's non-discretionary duties to approve, disapprove, and issue findings of failure to submit progress reports also reduces motivation and incentive for states to produce progress reports by the deadline or potentially at all. This would undoubtedly exacerbate the long history of state delays and non-compliance with the deadlines in the Clean Air Act generally and the Regional Haze Rule specifically. It is hard to envision how this likely result would not bleed into and inhibit effective and timely periodic comprehensive SIP revisions necessarily built on data and analyses due in the progress report.

EPA's proposed change would also make progress reports more difficult for the public to track, and would therefore undermine the Clean Air Act's goal of public participation. There are two existing, required opportunities in the progress report process for public participation: state and federal public comment periods. Currently, it is difficult to track the state public comment periods for all 50 states because there is no centralized repository. This has limited our organizations' abilities to participate in the progress report process in the past; we suggest an improvement below.

It is much easier to track the federal public comment periods because they are all published in the Federal Register. EPA states its intention to create a system of logging progress reports as they are received and making them available to the public. We applaud this intention, and believe that it should be implemented regardless of whether progress reports continue to be

required as SIP revisions. However, in order to be truly useful to the public, instead of waiting until it receives progress reports from states, EPA should add a requirement to 40 C.F.R. § 51.308(g) that states inform EPA via a common, publically available system when their progress reports are available for public comment. As noted above, the current system makes it difficult to track state public comment periods.

Particularly if progress reports are no longer required as SIP revisions, the state process is the only meaningful opportunity for public input. If progress reports need not be submitted as SIP revisions, the state level is where the most opportunity for input and change occurs. It is not burdensome for states to contribute to a systematic, nationwide tracking system. The same barriers to public participation occur with periodic comprehensive revisions; accordingly, we recommend that EPA should implement a tracking system that includes both periodic comprehensive revisions and progress reports.

If EPA does not maintain the requirement for progress reports to be submitted as SIP revisions, we support the specific reference in the proposed 40 C.F.R. § 51.308(i)(2) that requires consultation with FLMs on progress reports. Without this, there would be no mechanism to compel consultation with FLMs at the progress report stage because that obligation currently results from procedural requirements associated with SIP submittals. Even with the additional provision, however, we are concerned that a less willing state will neglect to engage with FLMs or use their discretion to ignore important input from the National Park Service, Forest Service and/or Fish and Wildlife Service.

Additionally, if EPA does not maintain the requirement for progress reports to be submitted as SIP revisions, the regulation should include an affirmative EPA obligation to review and act on each submitted or absent progress report within one year of the plan's submittal or relevant deadline. At a minimum, this would increase the clarity of the process and allow the public and other stakeholders a clearer timeline and potential for legal remedy. If EPA does not include such a provision, the final rule should at least include an affirmative EPA obligation to review and act on any submitted or absent progress reports if objected to by FLMs, states having affected Class I areas, or other stakeholders.

Should EPA remove the SIP obligation from the progress report, we suggest the following be added as a new 40 C.F.R. § 51.308(h)(5): "Within six months of a state's submission, EPA must act on each progress report by issuing (1) a finding of adequacy where the agency concludes that the state has fulfilled its obligation, (2) a finding of inadequacy triggering a state requirement to address EPA specified shortcomings within six months OR (3) a SIP call where the state fails to timely submit or address shortcomings identified by EPA resulting in the state's failure to meet commitments specified in the comprehensive haze SIP."

The Conservation Organizations also wish to take this opportunity to remind EPA of its obligation under 42 U.S.C § 7492(b) to conduct an assessment of actual progress and improvement in visibility in Class I areas resulting from Clean Air Act provisions beyond the visibility sections every five years. "The Administrator shall prepare a written report on each

assessment and transmit copies of these reports to the appropriate committees of Congress." *Id.* To the best of our knowledge, these reports have yet to be developed and submitted.

While it is apparent that EPA has tried to extrapolate and preserve elements of the SIP process in its proposal, the revised process is inadequate to achieve the stated objectives of the progress report, preserve accountability and provide the public with an adequate and efficient opportunity for engagement. To lessen the administrative burden on states, EPA need not remove the SIP obligation but should continue working with states, FLMs, and regional planning organizations to streamline progress reports. We strongly urge EPA to retain the current requirement that progress reports be submitted as SIP revisions.

3. Scheduling of progress reports

Currently, the regulations require progress reports every 5 years starting with the submittal of the first regional haze SIP. However, given that most states did not meet the deadline for submitting the haze SIP for the first planning period, many of the existing progress report deadlines do not fall mid-way between planning periods, and some fall very close to required periodic comprehensive revisions.³⁷ EPA proposes to address this by making two changes: first, to require reports mid-way through each planning period, on January 31, 2025, July 31, 2033, and every 10 years thereafter; and second, to integrate the progress reports that were intended to fall concurrently with the periodic comprehensive revisions into those revisions.

With regard to the first change, we agree that the progress reports intended to fall mid-way between planning periods should have deadlines that are in fact mid-way through the planning periods rather than five years after the initial SIP submissions and every five years thereafter. As noted elsewhere, we do not support EPA's proposed delay of the next round of periodic comprehensive revisions. Without this delay, progress reports would and should be required on July 31, 2023, and every 10 years thereafter. However, if EPA institutes the delay in its final rule, we support the dates for mid-planning period progress reports that EPA has proposed.

With regard to the second change, dealing with progress reports intended to fall concurrently with the periodic comprehensive revisions, EPA proposes to add 40 C.F.R. § 51.308(f)(5), requiring inclusion of the information in 40 C.F.R. § 51.308(g)(1)-(5) into the periodic comprehensive revisions. We support this change with the exception that all of the information in the progress reports should be included; that is, the information required in 40 C.F.R. § 51.308(g)(6) should be addressed in the periodic comprehensive revisions as well.

³⁷ Only two states, North and South Carolina, met the initial regulatory deadline of December 17, 2007. 77 Fed. Reg. 11,858 (Feb. 28, 2012); 77 Fed. Reg. 11,894 (Feb. 28, 2012). Our understanding is that Maryland was the last state to submit a haze SIP for the first planning period (excluding amended or supplementary haze SIPs). 77 Fed. Reg. 11,827 (Feb. 28, 2012).

G. RAVI

We support many of the proposed changes to the reasonably attributable visibility impairment ("RAVI") regulations. Specifically, we support EPA making the RAVI provisions applicable to all states. *See* 81 Fed. Reg. at 26,961 (May 4, 2016); *see also* proposed 40 C.F.R. § 51.300(b). Currently, the RAVI provisions apply only to states which contain a Class I area. *See* 40 C.F.R. §§ 51.302(a)(1), 51.300(b)(2). The RAVI provision was intended to address impairment which is reasonably attributable to a single source of small group of sources. *See id.* § 51.301. Federal land managers should be able to follow the data on sources of impairment wherever the data leads, rather than being arbitrarily precluded from designating a RAVI source in certain states. Accordingly, EPA's proposal to make the RAVI provisions apply to all states is consistent with the goal of the RAVI program.

We urge EPA to apply the RAVI provision to Puerto Rico as well. While Puerto Rico does not contain a Class I area, it is close enough to the Virgin Islands National Park (less than 300 km at the furthest distance, and roughly 90 km at the closest) that its emissions affect the Park's visibility.³⁸

In addition, we support the proposed amendments which would ensure that FLMs can base a RAVI certification on techniques that they determine to be appropriate even if such methods have yet to be approved by the States, and that a state must analyze and require controls as necessary once a FLM certification is made. *See* 81 Fed. Reg. at 26,962; *see also* proposed 40 C.F.R. §§ 51.301, 51.302(a)-(c). These changes strike the right balance between the role of the FLMs and the states. EPA's proposal properly recognizes the critical role of the FLMs as the primary stewards of our national parks and wilderness areas with intimate expertise on their resources and adverse impacts. At the same time, the proposal preserves the role of states, which is to assess the controls necessary in light of a RAVI certification.

We support the proposed provisions, 40 C.F.R. § 51.302(b),(c), which direct a state to respond to a RAVI certification by making a determination of the control measures at the RAVI source(s) necessary to make reasonable progress, unless the source is subject to BART and lacks an approved BART determination or BART alternative (in which case, a state must make a BART determination for the RAVI source). If BART control measures have not yet been required at a BART source, and a FLM certifies that visibility impairment is reasonably attributable to the source, it is critical that BART control measures be required in order to reduce the source's impacts. For non-BART sources, the four-factor test for reasonable progress provides an appropriate framework for evaluating control measures, particularly because states will soon have the benefit of the reasonable progress guidance EPA is developing. EPA must make clear throughout that the four factor analysis and associated guidance applies to sources certified as RAVI as well as sources states or EPA identify as RP sources subject to a four factor analysis.

³⁸ EPA's FIP for the Virgin Islands limited its consideration of the impact of emissions from Puerto Rico to a single model power plant. The lack of demonstrated impact from that single source should not be a determinant of the potential need for emission reductions from the island's entire suite of sources to provide reasonable progress and prevent future impairment to the Virgin Islands Class I area.

EPA also proposes that states submit a periodic SIP revision that addresses both regional haze and RAVI, 40 C.F.R. § 51.308(f)(2), in place of the existing 40 C.F.R. § 51.306 provisions requiring separate regional haze and RAVI SIP revisions. We support the streamlining of the planning process but request EPA provide a more detailed explanation as to how these revisions will address requirements for both regional haze and RAVI, as it is unclear in the current proposal. As explained below, states should be required to respond to a RAVI certification within 3 years, regardless of when the next periodic SIP revision is due. We recommend that any streamlining of these two processes not delay implementation of the controls needed to respond to a RAVI certification.

EPA has proposed three options for the deadline by which a state must respond to a RAVI certification. *See* 81 Fed. Reg. at 26,963; *see also* proposed 40 C.F.R. § 51.302(d). We support Option 1, which would retain the requirement that a state submit a SIP revision responding to a RAVI certification within 3 years of the certification. Option 1 is the only option that ensures that, regardless of when the certification is made, a state responds to a RAVI certification within a reasonable amount of time.

While Federal Land Managers have certified RAVI sources only four times, RAVI will continue to serve as a fundamental tool for addressing sources that impair visibility but nonetheless slip through the cracks of other haze provisions (*e.g.*, sources which slip past a PSD Class I impact analysis or dispute regarding the need for mitigation of visibility impairing emissions). It is untenable to allow the state or EPA more than 3 years to assess controls for a source or group of sources identified by the FLM as significant contributors to haze.

Option 2 would allow states close to five years to respond to a certification, if the certification is made shortly after a SIP revision or progress report is submitted. Option 3 would allow states nearly ten years to respond to a certification which is made shortly after a SIP revision is submitted. Delays of five to ten years are both unacceptable as a policy matter and inconsistent with the statutory mandate to make reasonable progress toward eliminating haze, 42 U.S.C. § 7491(b)(2). Moreover, delays longer than three years are incompatible with the fact that a source can be designated RAVI only if haze at a Class I area is reasonably attributable to that source. See 40 C.F.R. § 51.302(c)(4)(i). If the impacts from a source are significant enough to warrant a RAVI certification, then the state and EPA should prioritize requiring controls at that source in order to reduce haze. Option 1 is the only option that requires timely action consistent with the importance of reducing emissions from RAVI sources.

Finally, we recommend that the phrase "small number of sources" be changed throughout section 51.302 to "small group of sources." This is particularly important for efforts to address certain types of sources including oil and gas activities. For example, oil and gas wells in an area may be too numerous to qualify as a "small number of sources," but be within the intended framework of the RAVI provision. Therefore, changing the regulatory language to "small group of sources" would ensure that Federal Land Managers have the flexibility to certify visibility impairment reasonably attributable to activities that consist of small groups of many sources in an area.

H. Considerations of Visibility in Determining Reasonable Progress

1. Visibility improvement should not be a determining factor for reasonable progress controls.

EPA's proposal properly identifies visibility improvement as the essential metric for evaluating progress toward meeting the statutory mandate of eliminating human-made haze pollution. But while visibility improvement is the overarching driver for controls under the regional haze program, visibility may not be employed as a factor to disqualify controls from further consideration in the context of reasonable progress determinations. In the previous round of regional haze plans the degree of visibility improvement achievable was considered as part of BART control determinations. While the Conservation Organizations have not always supported the manner in which EPA evaluated visibility improvement in the BART context, we agree that it was an factor, where the Clean Air Act defines BART to include consideration of the "degree of improvement in visibility which may reasonably be anticipated to result from the use" or a particular retrofit technology being evaluated for BART. 42 U.S.C. § 7491(g)(2); see also 40 C.F.R. § 51.308(e). By contrast, the Act's definition of reasonable progress does not identify visibility improvement as a factor. Instead, the four factors to be evaluated when considering reasonable progress controls are the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements. 42 U.S.C. § 7491(g)(1); see also 40 C.F.R. § 51.308(d)(1)(i)(A). Accordingly, under the language of the statute, the evaluation of reasonable progress measures is a different analysis than the evaluation of BART.

And this difference makes perfect sense. Metrics for evaluating reasonable progress properly focus on the visibility improvement that will be achieved collectively by all measures adopted in the SIP. And where natural visibility conditions have not been met, the need for visibility improvement compels installation of pollution controls or other measures to make reasonable progress. In these circumstances, states cannot reject any available controls unless they affirmatively demonstrate that specific controls are unreasonable based on the four regulatory reasonable progress factors. *See* 40 C.F.R. § 51.308(d)(1)(i)(A) (current rule); *proposed* 40 C.F.R. § 51.308(f)(2) (proposed rule). In that sense, visibility improvement is a one-way ratchet: states must adopt the controls necessary to achieve reasonable progress (which is itself a measure of visibility improvement collectively achieved through all strategies adopted in the SIP), but they cannot reject control options based on an argument that the visibility benefits do not justify the cost.

In the guidance document, EPA recognizes that the plain statutory reasonable progress language does not include visibility as a fifth factor. EPA's preferred approach in Section 4.1 of the guidance document appreciates this distinction between visibility as a metric for evaluating progress and as a factor for adopting or rejecting controls. Unfortunately, EPA nonetheless suggests that an alternative may be permissible, where visibility improvement is considered in a reasonable progress analysis, just less so than the other four factors. Nowhere did Congress suggest that EPA may introduce another consideration even of lesser magnitude. While we appreciate the parameters the alternative would put in place (technically rigorous and agreed upon by EPA and FLMs, etc.) such constraints do not mask the fact that the alternative would

allow states to introduce a fifth factor into their analysis thereby directly contradicting the statutorily mandated analysis.

Reasonable progress goals will collectively need to specify the level of visibility improvements that will be made per planning period towards the national visibility goal. However, the specific level of visibility benefit from a pollution control or upgrade at a particular source cannot not be a factor for a state to exclude an otherwise cost-effective and environmentally beneficial pollution control, reduced emission limit, or other measure for a particular source or group of sources.

2. *EPA should make clear that a 0.5 deciview change is perceptible.*

In the preamble to the proposed rule, EPA states "[m]ost people can detect a change in visibility of one deciview." 81 Fed. Reg. at 26,947. EPA's statement that most people can detect a one deciview change is at odds with the FLMs' longstanding policies and EPA's past rulemakings. Since at least 2000, the FLMs have consistently considered a 5% change in extinction, or a 0.5 dv change, as a "just noticeable change in most landscapes." In EPA's 2004 proposed revisions to its Regional Haze Rules and proposed BART Guidelines, EPA stated that a 0.5 deciview change in visibility is linked to "perceptibility," and thus EPA proposed a 0.5 dv change as the threshold for determining that a source is causing visibility impairment at a Class I area. In its final rulemaking promulgating the BART Guidelines, EPA adopted 0.5 dv as a *maximum threshold* for determining whether a source contributes to noticeable visibility impairment. EPA stated in the BART Guidelines that "[a]s a general matter, any threshold that you use for determining whether a source 'contributes' to visibility impairment should not be higher than 0.5 deciviews" and EPA indicated that a lower threshold may be warranted if a larger number of sources are contributing to visibility impairment in a Class I area.

EPA's statement could be perceived as setting a new, less protective threshold for determining whether emissions result in noticeable impairment to visibility, and could thus have repercussions for both the prevention of significant deterioration (PSD) permitting program and the regional haze program. Moreover, EPA has provided absolutely no basis for this significant change in its longstanding position that a 0.5 deciview change in visibility represents a just noticeable change. Therefore, EPA must make clear in the final rule that a 0.5 deciview change is considered, and has always been considered to be, a just noticeable change in visibility.

EPA also must make clear in the rule that a just noticeable, or "perceptible," change in visibility is not a relevant threshold for making reasonable progress. EPA recognizes this in the draft guidance, noting for instance that "[a] state should also recognize that progress towards

⁴² 70 Fed. Reg. 39,104, 39,121 (July 6, 2005).

³⁹ Federal Land Managers' Air Quality Related Values Workbook (FLAG) Phase I Report, December 2002, at 26.

⁴⁰ EPA cited to a 1991 report from the National Acid Precipitation Assessment Program (NAPAP): NAPAP, Acid Deposition and Technology Report 24, Visibility: Existing and Historical Conditions – Causes and Effects, Washington, D.C., 1991, Appendix D at p.24-D2. *See* 69 Fed. Reg. 25,184, 25,194, 25,232 (May 5, 2004).

⁴¹ 69 Fed. Reg. at 25,194-95.

⁴³ See 40 C.F.R. Part 51, Appendix Y, Section III.A.1.; 70 Fed. Reg. at 39,161.

natural visibility conditions will require the accumulation of reductions in air pollution and associated light extinction that may not be individually perceptible."⁴⁴ Due to the nature of regional haze and the cumulative contributions of many sources over a broad geographic area, making reasonable progress requires controlling sources even when the visibility benefits from each source individually will not be perceptible.

I. <u>EPA Must Require Long-Term Strategies to Include Measures to Prevent</u> and Remedy Impairment of Visibility.

EPA's proposed revisions to the regional haze regulations do not sufficiently integrate requirements pertaining to a significant component of the national visibility goal—that is, requirements for prevention of future impairment of visibility. 42 U.S.C. § 7479(a)(1). EPA has historically relied on the prevention of significant deterioration ("PSD") permitting program and the visibility new source review (NSR) requirements mandated by 40 C.F.R. § 51.307⁴⁵ to address this requirement of the national visibility goal. 45 Fed. Reg. 80,089 (Dec. 2, 1980). However, much has changed in the PSD permitting program since 1980. The current PSD rules, as well as the major source nonattainment NSR rules, now exempt many modifications at existing major sources that were previously subject to PSD review and, thus, the PSD and visibility NSR rules do not provide Class I areas protections of the PSD permitting program from those modified sources that are exempt from major source permitting requirements and the visibility NSR requirements of 40 C.F.R. § 51.307. Further, there have been significant increases in minor sources in areas near Class I areas due to oil and natural gas development and other activities that are not adequately addressed by the PSD permitting program, if they are addressed at all.

EPA must make clear that it is requiring states to analyze and address the cumulative visibility impacts of these and any other sources that may affect Class I area visibility. It is especially important for EPA to articulate that, where major new or modified sources are not subject to the Class I area protections of the PSD permitting and visibility NSR requirements, the long term strategy provisions will capture those sources and ensure that they are subject to a four-factor reasonable progress analysis. Below we suggest amendments to deliver on the statutory goal of preventing future impairment. We will also be recommending related and supportive language in our comments on the updated guidance.

1. The 2002 PSD rule revisions exempt many modifications from PSD permitting that could result in large emission increases that could harm visibility.

EPA has historically relied on the PSD permitting program and the visibility NSR rules to meet the requirement of preventing future impairment of visibility. The FLMs have an affirmative responsibility to protect the air quality related values (including visibility) in Class I

⁴⁴ Guidance, *supra* note 5, at 1.

⁴⁵ 40 C.F.R. § 51.307(b)(2) and (c) provides that the PSD requirements of 40 C.F.R. § 51.166(o), (p)(1) through (2), and (q) apply to new and modified major sources proposing to locate in nonattainment areas that may have an impact on visibility in a mandatory Class I area.

areas. 42 U.S.C. § 7475(d)(2)(B). In order for a PSD permit to be issued for a major modification that may impact a Class I area, the Federal Land Manager must review the permit application and related information and determine whether the modified source would adversely impact any air quality related value including visibility in any Class I area. 40 C.F.R. §§ 51.307, 52.21(p). FLMs have the right and obligation to object to a proposed permit if the new or modified major source would adversely impact an air quality related value such as visibility. EPA has historically relied on these PSD and visibility NSR provisions to help prevent future impairment of visibility.

However, the December 2002 revisions to the PSD and nonattainment NSR program significantly reduced the scope of what modifications trigger major source permitting requirements by drastically changing the methodology for determining whether a significant emission increase would occur as a result of a modification. 67 Fed. Reg. 80,186, 80,244-89 (Dec. 31, 2002), also known as the "NSR Reform" Rule. Specifically, EPA changed the method for determining whether a significant emissions increase ⁴⁶ would occur and also changed the method for determining baseline emissions in a manner that allows a source to inflate emissions up to the highest two year average of the past ten years. ⁴⁷ Despite these significant regulatory changes which drastically reduced the scope of modified sources subject to PSD permitting, EPA has never re-evaluated its reliance on the PSD and nonattainment NSR programs as sufficient to prevent future impairment of visibility. These rule revisions can allow significant increases in actual emissions from existing sources to occur without any evaluation of the impacts on visibility and without even applying best available control technology ("BACT") or lowest achievable emissions rate ("LAER"), due to being exempt from permitting requirements.

Indeed, in 2003, the Environmental Integrity Project and the Council of State Governments/Eastern Regional Conference (EIP/CSG-ERC) issued a study of the increases in air pollutant emissions that could occur in 12 states as a result of the 2002 PSD rule revisions. That study indicated that the "ten-year lookback" for baseline emissions in the 2002 PSD rules alone

⁴⁶ EPA's original PSD and nonattainment NSR rules generally provided that the emission increase for modified major sources be determined based on the potential to emit of the source as modified taking into account enforceable limitations on emissions. *See*, e.g., 40 C.F.R. § 52.21(b)(21) and (b)(4) (1980). With the 2002 rule revisions, and for EGUs with revisions made in July 1992 (57 Fed. Reg. 32,314-339 (July 21, 1992)), sources could instead determine future emissions based on the "projected actual emissions" which do not have to be based on enforceable emission restrictions. *See*, e.g., 40 C.F.R. § 52.21(a)(2)(iv) and (b)(41) (2002).

⁴⁷ EPA's major source permitting rules originally required emissions increases to be calculated based on a comparison of actual emissions from generally the two years prior to a project to the federally enforceable potential to emit of the source after the project. *See* 40 C.F.R. § 52.21(b)(2), (3), (4), (21), (23) (from 2001 and earlier, back to 1980). EPA's revised rules allow future emissions to be based on "projected actual emissions" which are an projection of future actual emissions that are not required to be enforceable (40 C.F.R. § 52.21(a)(iv)(c) and (b)(41)), and allows sources to exclude from any projections "that portion of the unit's emissions following the project than an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions . . . and that are also unrelated to the particular project, including any increased utilization due to product demand growth" 40 C.F.R. § 52.21(b)(41)(ii)(c). EPA's revised rules also allow for non-EGUs to use the highest two years of emissions out of the last 10 years of operation as baseline actual emission, while EGUs can use the highest two years of emissions out of the last 5 years. 40 C.F.R. § 52.21(a)(iv)(c), (b)(41), (b)(48). EPA had promulgated some of these provisions for EGUs in 1992 (57 Fed. Reg. 32,314, 32,335-36 (July 21, 1992); 40 C.F.R. § 52.21(b)(21)(iv), (v), (b)(30), (b)(32) (1993)), but expanded these revisions for all sources in 2002.

could allow SO_2 emissions from 1,273 major sources in 12 states to increase by as much as 330,000 tons above 1999 levels, NO_x emissions to increase 335,000 tons above 1999 levels, and particulate matter to increase by as much as 48,800 tons above 1999 levels, among other pollutant increases. 48

Particularly given that the major source permitting rules, as revised in 2002, now exempt many modified sources that would have been subject to the visibility requirements of the PSD and visibility NSR programs, it is neither lawful nor rational to not allow states to solely rely on the PSD permitting and visibility NSR programs to prevent future impairment of visibility. EPA must ensure that states specify requirements in their periodic comprehensive SIPs to prevent future visibility impairment from modified major sources as well as minor stationary sources and other sources of emissions that may affect Class I area visibility.

2. *EPA must revise its regional haze regulations to ensure that long term strategies include measures to prevent and remedy visibility impairment.*

Several clarifying edits to the proposed amendments to the Regional Haze Rule would help ensure that the regulations deliver on the dual statutory mandate to both prevent and remedy impairment. First, we recommend EPA modify 40 C.F.R. § 51.308(f)(2) to read "Each State must submit a long-term strategy that addresses, **prevents**, **and remedies** regional haze visibility impairment" This recommendation merely parrots the statutory language further specifying the objective of the long term strategy.

Second, we recommend the second sentence of 40 C.F.R. § 51.308(f)(2) be modified as follows "The long-term strategy must **take into account the effect of new sources (including major sources, minor sources, area sources, mobile sources, and other sources of haze-causing emissions) and include the enforceable emission limitations" This edit brings in direct language from the existing section 40 C.F.R. § 51.306(g). EPA proposes to remove the entire 40 C.F.R. § 51.306 section and collapse requirements related to RAVI into the new 40 C.F.R. § 51.308(f). While much of EPA's proposed text will safeguard the underpinnings of the existing 40 C.F.R. § 51.306, the specific reference to new sources of emissions is glaringly absent in EPA's proposal. In addition, we recommend "new and existing" be added to the proposed 40 C.F.R. § 51.308(f)(2)(v), as follows in the last sentence of that section "The state should consider new and existing** major and minor stationary sources, mobile sources and area sources."

We commend EPA for making clearer in the proposed rule amendments and proposed guidance that states must make a robust analytical demonstration to support reasonable progress controls and measures. The language suggested above however will make clear that the state obligation does not rest with analysis alone, but the analysis must lead to requirements resulting in both the prevention and remedying of visibility impairment.

⁴⁸ Environmental Integrity Project and the Council of State Governments/Eastern Regional Conference, Reform or Rollback? How EPA's Changes to New Source Review Affect Air Pollution in 12 States, Summary Report, October 2003, at 2-3, http://environmentalintegrity.org/pdf/publications/ReformOrRollbackSummary_final.pdf.

It is important for EPA to stress the need for such measures to prevent and remedy visibility impairment as practical requirements that should be part of every states' Long Term Strategy to meet the statutory mandate of preventing and remedying impairment to visibility. These types of measures must be an enforceable part of the Long Term Strategy, in addition to the likely more source-specific reasonable progress measures. We request that EPA make this clear in the final rule, both with the revised regulatory language recommended above and in response to these comments.

We understand that EPA has designed the regional haze proposal to crystalize the way in which the regulation must be interpreted to deliver on the statutory objectives. To help achieve this result, we suggest EPA bring in the above language so that there can be no confusion as to whether or how the long term strategy must apply to the prevention of visibility impairment as well as remedying of existing impairment.

J. Improving Consultation

1. Consultation with Federal Land Managers

We support the proposed changes to 40 C.F.R. § 51.308(i)(2) that establish an enhanced consultation period for the FLMs before development of reasonable progress goals. We agree that this advanced opportunity for consultation with the FLMs will allow the states to better consider the FLMs' perspective on the status of and projections for Class I area visibility, sources of impairment, and appropriate reasonable progress targets.

However, given that the long-term strategies are developed only every 10 years, and that effective strategies require broad coordination among multiple states, EPA's proposal that consultation with the FLMs can wait until as late as 120 days before the public hearing on a state plan is insufficient. It may be useful for EPA to distinguish between the states providing a formal opportunity for FLM review of a complete visibility protection SIP revision and associated support documents and the need for ongoing consultation with FLMs in development of the SIP. EPA should encourage ongoing consultation with FLMs by directing the states to involve FLMs as part of EPA's implementation guidance.

Specifically, EPA should encourage the states to solicit input from FLMs when implementing EPA guidance for regional haze SIP development, particularly for Sections 5, 6, 7 and 9 of EPA's proposed guidance. Those sections cover ambient data analyses, screening of sources, source emission control measures characterization, and regional scale modeling of long-term strategies. FLMs have extensive experience in these areas from their long involvement in research and PSD/NSR review of source impacts, and participation in the technical efforts for all of the RPOs in the first planning period. EPA's proposed rule requirement should supplement the 120-day requirement for consultation with the FLMs on the overall regional haze plan revision of progress report with a certification by the states of which areas of the SIP development or progress report were developed with input from the FLMs. This is consistent with the current and proposed language of 40 C.F.R. § 51.308(i)(4) that requires the SIP to provide procedures for continuing consultation between the state and FLMs.

Such requirements would lessen some of contentious situations that developed during the development of the first round of BART and reasonable progress strategies when the FLMs had to appeal to the EPA to adequately address their concerns.

2. EPA should clarify that each state must adopt all necessary measures to ensure reasonable progress in each down wind Class I area affected by its pollution.

EPA's proposed clarification that all states must conduct a four-factor analysis of control measures is necessary to fulfill the statutory mandate to eliminate anthropogenic haze. Restricting the obligation to reduce haze causing pollution to only those states housing Class I areas would run counter to the design of the Clean Air Act's visibility protection provisions and the science of visibility impairment. While most states have embraced this reading of the Act, if not the obligation itself, EPA's clarification leaves unambiguous that the onus for achieving natural conditions at all Class I areas rests with each state and its contributing emission sources.

For any state with emissions that "may be reasonably anticipated to cause or contribute to any impairment of visibility" in any Class I area, the Clean Air Act requires "each" state's visibility implementation plan to "contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal" (i.e., natural visibility conditions) in "any such area." See 42 U.S.C. § 7491. In determining reasonable progress, each state must generally consider "the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources." *Id.* § 7491(g)(1). Additionally, the Clean Air Act's good neighbor provision requires each state's implementation plan to contain "adequate provisions prohibiting" any source within that state from emitting any air pollutant in amounts that "interfere" with measures included in any other state's implementation plan to protect visibility. *Id.* § 7410(a)(2)(D)(i)(II). Under the current Regional Haze Rule, each state must also "demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to meet the progress goal for" the affected Class I area. 40 C.F.R. § 51.308(d)(3)(ii). Thus, when read in the context of the Clean Air Act's visibility and good neighbor provisions, the Regional Haze Rule is intended to ensure that upwind states adopt all control measures necessary to achieve reasonable progress in each downwind state affected by its emissions.

Accordingly, we support revising the Regional Haze Rule to make clear that under the Clean Air Act, ⁴⁹ each state with sources that *may* cause or contribute to visibility impairment in any other state's Class I areas must properly consider the four statutory factors and demonstrate that it has included in its SIP all measures necessary to ensure reasonable progress toward natural visibility conditions for *any* affected Class I area. In other words, the CAA requires each state to determine 'reasonable progress' by considering the four statutory factors for both their own

⁴⁹ When Congress gives an agency authority to administer a statute, including authority to issue interpretive regulations, it implicitly accords the agency a degree of discretion, which the courts must respect, regarding the meaning of the statute. *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984).

Class I areas and downwind Class I areas. Such a clarification of the Regional Haze Rule's consultation requirements is not only the fairest and most natural reading of those regulatory provisions, but is the only interpretation that is consistent with the regulation as a whole, the Clean Air Act's visibility and good neighbor provisions, and EPA's obligation to ensure that each state SIP is consistent with all applicable requirements of the Act. *See* 42 U.S.C. § 7410(1) (EPA may not approve any plan that "would interfere with any applicable requirement" of the Act). Any other interpretation would allow an upwind state to continue impairing downwind visibility without consequence, regardless of whether there were reasonable, cost-effective measures that would improve downwind visibility.

While we agree with EPA's interpretation of what the Clean Air Act and the Regional Haze Rule require, EPA needs to make two clarifications. First, EPA needs to make clear that its proposed revisions regarding "contributing states" merely reflects what the CAA and the Regional Haze Rule already require—namely, that each state must consider the four statutory factors and must demonstrate that it has included in its SIP all measures necessary to ensure reasonable progress toward the national goal for any Class I areas affected by its emissions.

Second, EPA must ensure that the proposed rule revision reflects the agency's implementation of the same regulatory provisions in the Texas Regional Haze FIP. In disapproving the Texas and Oklahoma Regional Haze SIPs, EPA concluded that the Regional Haze Rule, as currently written, does not explicitly address situations:

where the control measures in an upwind state's long-term strategy are sufficient to obtain its share of reductions needed to meet a RPG included in a downwind state's SIP, but the goal itself is flawed precisely because the upwind state never proposed sufficient control measures to ensure reasonable progress in the first place. To prevent such situations, we interpret the term "progress goal" in Section 51.308(d)(3)(ii) as an *approved or approvable* progress goal.

79 Fed. Reg. at 74,829 (emphasis in original). This situation involves two interlocking elements: first, the upwind state's obligations towards contributing to reasonable progress at a Class I area it affects, and second, the downwind state's obligation to setting a reasonable progress goal that reflects emission reductions made by it and other states.

Although EPA mentions the Texas rule and the need to clarify the consultation provisions of the rule to ensure uniform application, EPA's proposed revisions only partially address the situation identified as ambiguous in the Texas FIP. With regard to the upwind state's obligation, the changes clarify that its obligation is to make sure that it is contributing its share of reasonable progress at the Class I area its sources affect, rather than to meeting pre-determined progress goals already set by the state housing the Class I area. We support this change, which is in line with EPA's more general clarifications on the process of determining controls first and then setting reflective goals. The table below shows relevant parts of EPA's current regulatory text and proposed new regulatory text.

Current Regulation	Clarification Offered in	New Proposed Regulation
	Texas-Oklahoma FIP	
"The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by States having mandatory Class I Federal areas." 50	Where other States cause or contribute to impairment in a mandatory Class I Federal area, the State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission	The State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to provide for reasonable progress towards natural visibility conditions in the mandatory
	reductions needed to meet <i>an approved or approvable</i> progress goal for the area. ⁵¹	Class I Federal area located in the other State or States. ⁵²

EPA should make clear that each state with sources that *may* cause or contribute to visibility impairment in any other state's Class I areas must properly consider the four statutory factors and demonstrate that it has included in its SIP all measures necessary to ensure reasonable progress toward natural visibility conditions for *any* affected Class I area.

EPA should also clarify that each state with sources that may affect Class I areas in other states has an affirmative obligation to ensure, based on a four-factor reasonable progress analysis and associated technical documentation, that it has included all necessary measures to ensure reasonable progress toward the national goal at each and every Class I area affected by its emissions.

EPA's proposed changes fail to fully address how a downwind state should set reasonable progress goals where it is uncertain as to the adequacy or substance of a contributing state's reasonable progress determinations. Through the consultation process, a downwind state can request that a contributing state require specific emission reduction measures that the downwind state identifies as necessary to provide for reasonable progress in its affected Class I areas. EPA's revisions should make clear that the downwind state can consider information about the effect those reductions would have on its RPGs if they were or weren't adopted by the upwind state. EPA needs to explicitly consider this information in reviewing the adequacy of the contributing state's SIP. Further, to strengthen the consultation process, EPA's revisions should affirm an obligation for the contributing state to address any emission reductions measures identified as necessary through consultation or a regional planning process. If it does not include the identified measures, the contributing state should be required to demonstrate that they are not reasonable under the factors listed in (f)(2)(i).

⁵⁰ 40 C.F.R. § 51.308(d)(3) (emphasis added).

⁵¹ 79 Fed. Reg. at 74,829 (emphasis in original).

⁵² 81 Fed. Reg. at 26,972 (proposed new 40 C.F.R. § 51.308(f)(2)(iii)(A)); *see also id.* (proposed new § 51.308(f)(2)) ("The long-term strategy must include the enforceable emissions limitations, compliance schedules, and other measures that are necessary to achieve reasonable progress").

To accomplish the above recommendations, we recommend the following changes, in bold and strike-through, to proposed 40 C.F.R. § 51.308(f)(2):

- (2) Long-term strategy for regional haze and reasonably attributable visibility impairment (i) ***
- (ii) The State must consider the uniform rate of improvement in visibility, the emission reduction measures identified in (f)(2)(i), and additional measures being adopted by *identified in* other contributing states in (f)(2)(iii) as needed to make reasonable progress towards natural visibility conditions for the period covered by the implementation plan.
- (iii) ***
- (A) Contributing States. . . . If the State has participated in a regional planning process, the State must also ensure that it has included, based on the factors listed in (f)(2)(i), all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process. If the State does not include emission reduction measures identified by the downwind state as necessary to provide for reasonable progress through consultation or regional planning process, the State must demonstrate that those measures are not reasonable under the factors listed in (f)(2)(i).
- (B) States affected by contributing States. A State with a mandatory Class I Federal area must consult with any other State having emissions that are reasonably anticipated to contribute to visibility impairment in that area regarding the emission reductions needed in each State to provide for reasonable progress towards natural visibility conditions in that area. The State may consider the effect of contributing States' emission reduction measures in setting reasonable progress goals. If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process.
- (C) In any situation in which a State cannot agree with another State or group of States on the emission reductions needed for reasonable progress towards natural visibility conditions in any mandatory Class I Federal area, each involved State must describe in its submittal the actions taken to resolve the disagreement. In reviewing the State's implementation plan submittal, the Administrator will take this information, and any information a State with a mandatory Class I Federal area relied upon in developing its RPG including identified emission reduction measures from contributing States, into account in determining whether the State's implementation plan provides for reasonable progress towards natural visibility conditions at each mandatory Class I Federal area that is located in the State or that may be affected by emissions from the State. All substantive interstate consultations must be documented. ⁵³

sources, and whether Texas had adopted reasonable measures to reduce its share of impairment in Oklahoma. We urge EPA to confirm that the regulations require EPA to follow a similar approach for all states.

⁵³ Based on EPA's statements in the Texas and Oklahoma haze rulemaking, we understand EPA to interpret the haze rule to require EPA to assess whether the measures states have adopted in their SIPs are collectively sufficient to assure reasonable progress in each affected Class I area. If they are not sufficient, EPA must apportion emission reductions among contributing states as are necessary to make reasonable progress. For example, EPA assessed the reasonable progress goals for Oklahoma Class I areas based on the portion of impairment attributable to Texas

Additionally, to further encourage a robust interstate consultation, EPA should make clear that it will, if a downwind state submits a request, exercise its authority under 42 U.S.C. § 7414 to require upwind sources to provide information necessary to fully evaluating the reasonableness of emission reductions. Under Section 7414(a), EPA may require sources to provide EPA with information about control equipment and other operations data "necessary" "[f]or the purpose (i) of developing or assisting in the development of any implementation plan under section 7410 " See 42 U.S.C. § 7414(a). Where upwind state sources are reasonably likely to cause or contribute visibility impairment in downwind states, EPA should allow downwind states to request that EPA exercise its authority under Section 7414(a) for the purposes of informing and developing the downwind state's regional haze SIP. Such an approach would not only encourage a more robust and transparent interstate consultation, but it would go a long way toward avoiding interstate disagreements over the need for upwind emission reductions. Indeed, providing downwind states with sufficient information to conduct their own, independent reasonable progress analyses would provide an important "check" on the upwind state's obligation to impose all measures as may be necessary to make reasonable progress toward the national goal. EPA should explicitly consider this information in reviewing the adequacy of the contributing state's SIP.

Finally, in the Texas FIP, EPA observed that under the current regulation each state "must document the technical basis, including modeling, monitoring and emissions information, on which the State is relying to determine its apportionment of emission reduction obligations necessary for achieving *reasonable progress* in each mandatory Class I Federal area it affects."⁵⁴ While the current regulations provide that, "[s]tates may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants," the Texas haze rule clarified that in situations "where a regional planning organization's analyses are limited, incomplete or *do not adequately assess the four factors*, however, then states must fill in any remaining gaps to meet this requirement."⁵⁵

Current Regulation	Clarification Offered in	New Proposed Regulation
	Texas-Oklahoma FIP	
Each state "must document	"States may meet this	As part of the demonstration
the technical basis, including	requirement by relying on	required by $(f)(2)(i)$, the State
modeling, monitoring and	technical analyses developed	must document the technical
emissions information, on	by the regional planning	basis, including information
which the State is relying to	organization and approved by	on the factors listed in
determine its apportionment	all State participants." Thus,	(f)(2)(i) and modeling,
of emission reduction	states have the option of	monitoring, and emissions
obligations necessary for	meeting this requirement by	information, on which the
achieving <i>reasonable</i>	relying on four-factor	State is relying to determine
<i>progress</i> in each mandatory	analyses and associated	the emission reductions from

⁵⁴ 79 Fed. Reg. at 74,829 (emphasis in original).

⁵⁵ 79 Fed. Reg. at 74,829 (emphasis in original).

CI IF I I '	. 1 . 1 1	.1
Class I Federal area it	technical documentation	anthropogenic sources in the
affects."56	prepared by a regional	State that are necessary
	planning organization. In	for achieving reasonable
	situations where a regional	progress towards natural
	planning organization's	visibility conditions in each
	analyses are limited,	mandatory Class I Federal
	incomplete or do not	area it affects. The State may
	adequately assess the four	meet this requirement by
	factors, however, then states	relying on technical analyses
	must fill in any remaining	developed by a regional
	gaps to meet this	planning process and
	requirement. ⁵⁷	approved by all State
		participants. ⁵⁸

EPA should clarify that where a regional planning organization's analyses are limited, incomplete or do not adequately assess the four factors, and do not fully allocate the emission reductions necessary to assure reasonable progress, however, then states must fill in any remaining gaps to meet this requirement – and if states fail to do so, EPA must step in and allocate the necessary emission reductions. ⁵⁹

K. <u>EPA's Proposal to Extend the Deadline for Regional Haze State</u> Implementation Plans is Arbitrary, Capricious, and Contrary to Law.

EPA proposes to amend several aspects of the Regional Haze Rule, 40 C.F.R. § 51.308, to clarify the criteria for measuring reasonable progress under 42 U.S.C. § 7491. Among other changes to the regulations that govern the achievement of reasonable progress under 42 U.S.C. § 7491, EPA proposes to extend the compliance deadline for the submission of state implementation plan revisions for three years, until July 31, 2021. EPA must withdraw its proposed three-year extension for four reasons.

First, the delay is inconsistent with the requirement that states revise their SIPs within 12 months of "any regulations promulgated" under the Clean Air Act's visibility provisions. 42 U.S.C. § 7492(e)(2). Second, EPA's rationales for extending the deadline do not justify delay. Third, extending the deadline for revised SIPs until 2021 likely means that it will be several years after 2021 before the second round haze plans are approved or disapproved by EPA. As a practical matter, the extension and anticipated delays also makes it difficult for states and sources to actually achieve visibility improvements by 2028, the end of second planning period. Finally, EPA's proposed delay threatens grave harm to public health and is therefore contrary to the Clean Air Act's "overriding" and "paramount" goal of protecting public health and welfare.

⁵⁷ 79 Fed. Reg. at 74,829 (emphasis added).

⁵⁶ *Id.* § 51.308(d)(3) (emphasis added).

 $^{^{58}}$ 81 Fed. Reg. at 26,972 (proposed new 40 C.F.R. \S 51.308(f)(2)(iv)).

⁵⁹ 79 Fed. Reg. at 74,829 (emphasis added).

1. EPA's proposal to extend the deadline for the submission of haze plans violates the plain language of the Clean Air Act.

The Clean Air Act, 42 U.S.C. § 7492(e)(2), sets an explicit deadline for the submittal of regional haze SIP revisions incorporating and addressing "any regulations promulgated" under the Act's visibility provisions. Under the statute, "any regulations promulgated under section 7491" of the Act:

shall require the affected states to revise *within 12 months* their implementation plans under section 7410 of this title to contain such emission limits, schedules of compliance, and other measures as may be necessary to carry out regulations promulgated pursuant to this subsection.

42 U.S.C. § 7492(e)(2) (emphasis added). EPA's proposed amendments to the Regional Haze Rule fall within the meaning of section 7492(e)(2)'s reference to "any regulations promulgated under section 7491." *Id.* (emphasis added). As support for its legal authority for the proposed revisions to the Regional Haze regulations, EPA explicitly relies upon 42 U.S.C. § 7407, which in turn references EPA's development of regulations pursuant to 42 U.S.C. § 7492(e)(1), which in turn directs EPA to carry out its regulatory responsibilities under § 7491. 81 Fed. Reg. at 26,968; *see also* 42 U.S.C. § 7407(d)(7) (referring to regulations promulgated pursuant to 42 U.S.C. § 7492(e)(1)).

Moreover, EPA repeatedly refers to "section 169A" (*i.e.*, 42 U.S.C. § 7491) throughout the proposed revision. *See, e.g.*, 81 Fed. Reg. at 26,942-45, 26,948. Even in the absence of an explicit reference to its statutory authority under section 7491, EPA's proposed revisions are issued "under section 7491" of the Act. The revisions establish revised criteria governing the development, evaluation, and implementation of regional haze plans to ensure "reasonable progress" toward the national goal under section 7491. EPA's proposed Regional Haze Rule revisions also "carry out the Administrator's responsibilities" under the visibility provisions of the Act, and include *additional or revised* "criteria for measuring 'reasonable progress' toward the national goal." *See* 42 U.S.C. § 7492(e)(1).

Consequently, section 7492(e)(2) plainly applies, and EPA must require states to submit regional haze revisions within 12 months of promulgating any final rule. EPA's proposal to extend the deadline for the submission of revised regional haze plans for nearly five years—until 2021—is inconsistent with Congress's clear direction to require SIP revisions within 12 months of "any regulations promulgated under section 7491." 42 U.S.C. § 7492(e)(2) (emphasis added).

EPA itself has recognized that section 7491 establishes an "explicit timeframe[]" for states to revise their state implementation plans in response to EPA's rules. 64 Fed. Reg. at

-

⁶⁰ See Ali v. Fed. Bureau of Prisons, 552 U.S. 214, 218-19 (2008) (observing that "[r]ead naturally, the word 'any' has an expansive meaning"); *Nguyen v. United States*, 556 F.3d 1244, 1252 (11th Cir. 2009) ("We all know that 'any' is all-embracing and means nothing less than all.").

35,724. Indeed, in implementing the 1999 amendments to the Regional Haze Rule, EPA recognized that section 7492(e)(2) imposed a 12-month deadline for SIP revisions, and initially proposed to require states to revise their SIPs within that timeframe.⁶¹

Nowhere does the Clean Air Act authorize EPA to abrogate or extend the Clean Air Act's clear statutory deadlines for haze SIP submittals. *Michigan v. EPA*, 268 F.3d at 1081 ("if there is no statute conferring authority, a federal agency has none"). The rules that EPA is authorized to adopt under 42 U.S.C. §§ 7491 and 7492 are those setting forth the substantive requirements for regional haze SIPs, and under the plain language of those are the rules that SIPs due within 1 year must satisfy under § 169B(e)(2). EPA cannot convert authority to adopt substantive rules into a license to extend statutory deadlines. *Sierra Club v. EPA*, 129 F.3d 137, 140 (D.C. Cir. 1997) (EPA cannot establish "grace period" by rule where not authorized to do so by the statute); *Sierra Club v. EPA*, 719 F.2d 436, 469 (D.C. Cir. 1983) (voiding EPA extension of statutory deadline for submittal of SIP revisions).

A major impetus for the 1990 amendments to the Act's visibility provisions was Congress' frustration with EPA's long delay in implementing the haze program. Members expressed "great disappointment" in EPA's failure to address regional haze, and wanted EPA to "move forward quickly to stop pollution of our parks and wilderness areas before the problem gets any more serious." 1990 Leg. Hist. 6090, 6120 (remarks of Senators Adams and Wirth).

It is especially untenable for EPA to waive section 7492(e)(2)'s express deadline on policy grounds when such a departure will frustrate other policy goals that Congress sought to promote. *See Engine Mfrs Ass'n v. EPA*, 88 F.3d 1075, 1089 n.42 (D.C. Cir. 1996).⁶² Indeed, EPA's proposal to extend the deadline for regional haze SIP revisions would effectively stay the states' and EPA's obligation to ensure "reasonable progress" toward the national goal of eliminating man-made haze pollution in the national parks. A three-year delay in regional haze planning and implementing the emission limits and other measures "*necessary* to make reasonable progress toward the national goal" is not "*reasonable progress*." 42 U.S.C. §

[.]

⁶¹ In enacting the Transportation Equity Act for the 21st Century, Congress explicitly reset the deadline for the states' submittal of their haze SIPs implementing the 1999 regulations. The amendment provided that initial regional haze SIP revisions were due within three years of designation for those states that contained areas EPA designated as nonattainment for the 1997 PM2.5 NAAQS, and within one year of designation for those states that EPA designated as being in attainment or unclassifiable for the 1997 PM2.5 standard. *See* Public Law 105–178 (partially codified at 42 U.S.C. § 7407(d)(7)).

There is no indication, however, that Congress intended to repeal section 7492(e)(2)'s applicability to all future Regional Haze Rulemakings. Both sections 7491 and 7492 contemplate future regulatory revisions, and it would make no sense to interpret Congress's amendment as extending the deadline for submitting revised reasonable progress SIPs at issue here for three years after area designations for the 1997 PM2.5—designations that were finalized nearly twenty years ago. Nor does it make sense to conclude that EPA could revise the regional haze regulations without *ever* requiring states to submit corresponding revised SIPs implementing the revisions. Instead, the Clean Air Act's visibility provisions should be read to mean what they say—namely, that "any regulations promulgated under section 7491" of the Act "shall require the affected states to revise *within 12 months* their implementation plans under section 7410 of this title to contain such emission limits, schedules of compliance, and other measures as may be necessary to carry out regulations promulgated pursuant to this subsection."

⁶² As discussed more fully below, EPA's claims about promoting better coordination with other Clean Air programs are simply misplaced.

7491(b)(2) (emphasis added). Indeed, this compromises progress. Thus, EPA's proposal to extend the deadline for regional haze SIP revisions is not only inconsistent with the plain meaning of 42 U.S.C. § 7492(e)(2), but it would thwart Congress's mandate to make reasonable progress toward remedying—and ultimately eliminating—man-made haze pollution.

2. *EPA's rationales do not justify the proposed extension.*

Second, EPA's proposal is arbitrary and capricious because the extension has no rational basis and does not reflect reasoned decision-making. EPA presents a single rationale for the 3-year delay: that the additional time will allow states to coordinate their haze SIPs with other environmental rules, and such coordination will lead to better policies. *See* 81 Fed. Reg. at 26,965. Specifically, EPA claims that the delay will allow states to coordinate planning with four other rules: the Mercury and Air Toxics Standard ("MATS"), 1-hr SO₂ NAAQS, the 2012 annual PM_{2.5} NAAQS, and the Clean Power Plan ("CPP"). But the compliance deadline for the MATS rule was April 2015, with one-year extensions available to April 2016. 77 Fed. Reg. 9407, 9409-10 (Feb. 16, 2012). States do not need a 3-year extension in order to coordinate haze plans with the MATS rule, because states know today how facilities will comply with the MATS rule and what emissions reductions will be achieved as a result of the MATS rule.

Nor will a 3-year delay provide any meaningful, additional opportunities for states to coordinate haze SIPs with 1-hr SO₂ NAAQS planning. EPA has already made both the first and second rounds of designations for the 1-hr SO₂ NAAQS. 78 Fed. Reg. 47,191 (Aug. 5, 2013); 81 Fed. Reg. 45,039 (July 12, 2016). States will have two years to coordinate haze and SO₂ planning prior to the current July 2018 deadline for submitting haze SIPs. Two years is ample time for states to coordinate their haze and SO₂ planning.

Similarly, under the current deadline for haze SIP submissions, states will have more than adequate time to coordinate haze SIPs with planning for the 2012 annual PM_{2.5} NAAQS. After issuing the NAAQS in 2012, EPA designated areas as nonattainment in January and April 2015. *See* 80 Fed. Reg. 2206 (Jan. 15, 2015); 80 Fed. Reg. 18,535 (Apr. 7, 2015). Under the 2018 deadline for submission of the next round of haze SIPs, states would have more than three years from the complete PM_{2.5} NAAQS designations to coordinate their haze SIPs with PM_{2.5} planning. EPA has provided no evidence that three years would be insufficient.

Moreover, only some states contain areas designated as nonattainment for either the 1-hr SO₂ or the 2012 PM_{2.5} NAAQS. It is illogical to delay *all* states' deadline for submitting the next haze SIP revision simply because *some* states need to develop nonattainment SIPs.

There is no justification for delaying the haze program on account of the Clean Power Plan, either. The CPP is currently being challenged in the D.C. Circuit Court of Appeals, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir.), and the United States Supreme Court has stayed the effectiveness of the CPP. *West Virginia v. EPA*, No. 15A773 (U.S. S.Ct. Feb. 9, 2016). In response to the stay, many states have halted work on compliance with the Clean Power Plan until litigation over the rule is resolved. There is no rational basis for delaying the haze program so that states can coordinate planning with a rule that is currently stayed and where many states have publicly pledged that they will not plan to comply with the CPP until legal challenges are resolved and the Supreme Court stay is lifted.

Moreover, EPA has offered no rational basis for why other environment programs should move forward but the regional haze program should be delayed. Regardless of the deadline for submitting haze SIPs, there will always be other air quality rules which states are preparing to implement. There are air rules for which states must plan before 2021, and there will be other rules for which states must plan after 2021. EPA offers no basis for singling out certain environmental rules that purportedly should hold up development of haze plans.

Additionally, the delay will undermine the goal of coordinated, regional planning among states. It is entirely unclear, for instance, how a contributing state submitting its plan by the existing 2018 deadline (as some states are aiming to do)⁶³ would know whether a demonstration under 51.308(f)(3)(ii) is required or not, if the state with the affected Class I area does not submit its plan until 2021. Conversely, it is unclear how a state with an affected Class I area is supposed to set its reasonable progress goals based on measures taken in contributing states if those contributing states develop their plans years apart. Encouraging a potential three year gap between the development of plans in different states unnecessarily complicates the critical interstate consultation process and undermines the ability of those states to fulfill their respective obligations.

Finally, instead of promoting coordinated SIP planning, EPA's proposal to extend the deadline for regional haze revisions will needlessly inject additional regulatory uncertainty into the haze program, and undermine ongoing state as well as utility planning processes. Contrary to EPA's conclusory assertions, maintaining the 2018 deadline for SIP revisions would better facilitate coordinated planning for haze and other environmental rules. To meet the deadlines for submitting nonattainment SIPs for the 1-hr SO₂ and the PM2.5 NAAQS, states must begin developing nonattainment SIPs now. If EPA delays the haze SIP deadline until 2021, many if not most states will likely halt work on haze SIPs, which will produce the opposite of what EPA intends: a lack of coordination between developing haze and nonattainment SIPs.

Most investor-owned utilities that are subject to public utility commission regulation are required to develop multi-year integrated resource plans, which govern those regulated utilities' decisions to develop, procure, retrofit, or retire various generation resources. The predicted cost and operational impacts of various environmental compliance obligations, like the second planning period of the Regional Haze Rule, have already been evaluated and incorporated into many utilities' integrated resource plans. EPA's proposed deadline extension unnecessarily injects uncertainty into many already completed resource plans, and threatens to create additional uncertainty for those utilities that have not yet completed the process.

3. EPA's proposal to extend the deadline for regional haze SIP revisions fails to account for the likely delays in developing and approving SIP revisions.

EPA's proposal to extend the deadline for regional haze SIP revisions would unnecessarily delay a program that has already suffered from decades of delay. Nearly 40 years

۵.

⁶³ See, e.g., Class I States' Resolution Calling Upon States in the Mid-Atlantic/Northeast Visibility Union (MANE-VU) to Pursue Timely Updates to Regional Haze State Implementation Plans. November, 2015.

ago, Congress amended the Clean Air Act and established "as a national goal, the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." 42 U.S.C. § 7491(a)(1). The 1977 amendments further directed EPA to promulgate, not later than August 7, 1979, rules "to assure [] reasonable progress toward meeting the national goal" of restoring these areas to natural visibility conditions. 42 U.S.C. § 7491(a)(4). EPA did not meet the 1979 deadline for adopting regulations to assure reasonable progress towards the national goal. Instead, in 1980, EPA adopted a limited rule to address visibility impairment "reasonably attributable" to a single source or small group of sources (such as a single power plant or industrial facility). 45 Fed. Reg. 80,084 (Dec. 2. 1980). *Id.* EPA's 1980 rule did not address the broader problem of regional haze, which is created by pollution from many diverse sources, and which is the main cause of visibility impairment in most parks and wilderness areas. 64

Ten years later, when Congress again amended the Clean Air Act in 1990, EPA had still not adopted the rules required by the 1977 Amendments to assure reasonable progress toward the national goal. Frustrated by EPA's "disappointing" record and "unreasonable delay" in implementing the visibility provisions of the Act, ⁶⁵ Congress directed EPA to promulgate, within 18 months, regulations implementing the requirements of section 7491, including criteria for measuring reasonable progress toward the national goal. 42 U.S.C. § 7492(e)(1).

Finally, in July 1999, nearly 20 years after the initial deadline for regulations, EPA adopted its Regional Haze Rules. After a legal challenge to the rule, *see American Corn Growers Ass'n* v. *EPA*, 291 F.3d 1 (D.C. Cir. 2002), and issuance of a revised rule, EPA required states to submit the first round of regional haze SIPs by December 17, 2007—more than thirty years after Congress passed the original haze provisions.

Most states failed to meet the 2007 deadline to submit regional haze SIPs. 74 Fed. Reg. 2392, 2393 (Jan. 15, 2009) (finding that 37 states, the District of Columbia, and the Virgin Islands had either wholly failed to submit regional haze SIPs, or submitted substantially incomplete SIPs). Despite finding and publishing that states and territories had failed to submit approvable plans, by January 2011, EPA still had not issued regional haze FIPs or approved corrected SIPs for any of those 39 states and territories. Consequently, several conservation organizations filed suit to compel EPA to fulfill its mandatory duty to issue federal implementation plans for those states within two years. *See Nat'l Parks Conservation Ass'n et al. v. U.S. Envt'l Prot. Agency*, No. 1:11-cv-01548 (ABJ) (D. D.C. filed Aug. 29, 2011).

-

⁶⁴ The 1980 RAVI regulations applied only to the 35 states and one territory containing Class I areas, and required those states to submit revised SIP's satisfying those provisions to EPA by 1981. In practice, however, the RAVI regulation resulted in few SIP revisions. In fact, only one state (Alaska) timely submitted a SIP addressing RAVI. 52 Fed. Reg. 45,132 (Nov. 24, 1987). As a result of the states' and EPA's collective delay in implementing the RAVI regulations, several conservation organizations, including NPCA, filed suit in 1982, to compel EPA to issue federal implementation plans for the states that failed to submit SIP revisions. *Id.* Despite that lawsuit, EPA and the states dragged their feet for several more years before finally revising and approving implementation plans addressing reasonably attributable visibility impairment. *See, e.g.*, 53 Fed. Reg. 30,428 (Aug. 12, 1988) (EPA final rule approving Colorado SIP revision).

⁶⁵ See, e.g., Conference Report on S. 1630, Clean Air Act Amendments of 1990, 136 Cong. Rec. H12848-01, 19990 WL 165511 (Oct. 26, 1990) (comments of Sen. Wyden).

For the majority of states, the first round of haze plans were not completed until 2012 or later—nearly 35 years after Congress first established the haze program. In fact, several states—including Alabama, Arkansas, Louisiana, Mississippi, Montana, Nebraska, North Dakota, Pennsylvania, and Texas— *still* do not have final complete haze plans for the first planning period, which were due nearly a decade ago.

Given this history of delay in submitting and processing SIPs and issuing FIPs, there is every reason to expect that this pattern will recur for the second planning period. It is reasonable to assume that EPA's proposal to extend the deadline for SIP revisions until 2021 will mean that states will not have final, second-round haze plans until several years after 2021.

Furthermore, while we appreciate and support EPA's maintaining the 2028 compliance deadline for the second planning period, we have serious doubts about the feasibility of sources implementing controls by 2028. Specifically, we are concerned that many states will fail to submit SIP revisions by 2021, and that it will take EPA several years to take final action on SIP submissions and issue FIPs as necessary. Based on the history of delay in implementing the haze program to date, an additional three year extension unnecessarily threatens to stall progress toward the national goal.⁶⁶

In sum, EPA's proposal is arbitrary and capricious because it does not account for the real-world delays that have occurred in the haze program and are likely to recur. More than 40 years after Congress passed the haze provisions in 1977, the majority of states have only recently completed the initial round of regional haze plans, and eight states still lack complete regional haze plans for the first planning period. EPA arbitrarily fails to mention or in any way consider this decades-long delay in its proposal to extend the submittal deadline for the next round of haze SIPs by three years. Because of the potential for these delays to recur in the second planning period, it is imperative that EPA retain the existing deadline for submission of the second round of haze plans.

4. *EPA's proposed deadline extension threatens the paramount purpose of the Clean Air Act to protect public health.*

The same pollutants that cause visibility impairment also cause significant public health impacts. Nitrogen oxides (" NO_x ") are precursors to ground level ozone, which is associated with respiratory diseases, asthma attacks, and decreased lung function. Similarly, sulfur dioxide (" SO_2 ") increases asthma symptoms, leads to increased hospital visits, and can form particulates that aggravate respiratory and heart diseases and cause premature death. ⁶⁷ Both NO_x and SO_2

⁶⁶ To avoid undermining the regional haze program, EPA must, at a minimum, make clear that federal or state implementation plans must require emissions reductions that meet the four-factor reasonable progress test even if the timeline for the installation of those pollution controls exceeds the planning period. In other words, states and major sources cannot avoid installing controls that meet the four statutory reasonable factors simply because those controls cannot, as a technical matter, be installed before the end of the planning period. In the absence of such a clarification, states and major pollution sources have a perverse incentive to stall regional haze planning as long as possible, so as to avoid being required to reduce emissions.

⁶⁷ EPA, Health – Sulfur Dioxide, http://www.epa.gov/air/sulfurdioxide/health.html.

react with ammonia, moisture, and other compounds in the atmosphere to form fine particulate matter ("PM") that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death. ⁶⁸ PM can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, chronic bronchitis, and heart attacks. ⁶⁹

Accordingly, EPA has repeatedly recognized that actions to reduce visibility-impairing pollutants will benefit public health and reduce adverse effects to the environment. Indeed, EPA estimated that implementing the BART guidelines would result in annual NO_x reductions of about 600,000 tons, and SO₂ reductions of approximately 400,000 tons annually. EPA then quantified the public health benefits of those reductions, and found that the implementation of the regional haze program's BART provisions would yield \$8.4 to \$9.8 billion *annually* in nationally health benefits—preventing 1,600 premature deaths, 2,200 non-fatal heart attacks, 960 hospital admissions, and over 1 million lost school and work days *every year* that the anticipated emission limits were effective. ⁷²

More recently, Sierra Club and NPCA have submitted expert analyses documenting the human health benefits associated with the regional haze plans for Texas, Oklahoma, and the Navajo Generating Station. Using the same methodology that EPA used in its evaluation of the health benefits of the BART programs, and relying on EPA-approved Environmental Benefits Mapping and Analysis Program ("BenMAP"), Sierra Club and NPCA estimated the health benefits associated with the changes in ambient air pollution resulting from EPA's Texas FIP. As shown in Exhibit C, by reducing more than 230,000 tons of SO₂, the haze plan for Texas will save more than 300 lives, avoid thousands of asthma episodes, and result in over \$3 billion in public health benefits each year. Similarly, EPA's regional haze FIP for Oklahoma, by reducing up to 90,000 tons of SO₂, will result in more than \$150 million in public health benefits annually.

⁶⁸ EPA, Health – Nitrogen Dioxide, http://www.epa.gov/air/nitrogenoxides/health.html.

⁶⁹ EPA, Health – Particulate Matter, http://www.epa.gov/air/particlepollution/health.html.

 $^{^{70}}$ See, e.g., 81 Fed. Reg. at 26,946 (proposed rule revision); 69 Fed. Reg. 25,184 (Revisions to BART Regulations); 64 Fed. Reg. 35,714 (1999 Regional Haze Rule).

⁷¹ EPA, Fact Sheet – Final Amendments to the Regional Haze Rule and BART Guidelines, https://www.epa.gov/sites/production/files/2016-02/documents/fs 2005 6 15.pdf. The Conservation Organizations estimate that the first round of regional haze plans have required—from coal-fired power plants alone—reductions of 785,000 tons of sulfur dioxide and 420,000 tons of nitrogen oxides, along with a co-benefit of reducing more than 52 million metric tons of carbon dioxide. These substantial pollution reductions will result in significant public health benefits, especially for the communities surrounding these coal-fired power plants. Although these reductions are significant, it is important to note that the first round of regional haze plans did not require significant pollution reductions from all eligible sources. Given the similarities between the BART and reasonable progress analyses, and the applicability of reasonable progress requirements to BART and non-BART sources alike, it is reasonable to expect that the second round of regional haze plans will yield similar pollution reductions. EPA's three-year extension in requiring SIP revisions will result in a corresponding delay in the realization of the health benefits associated with those pollution reductions.

⁷² See EPA, Fact Sheet – Final Amendments to the Regional Haze Rule and BART Guidelines, https://www.epa.gov/sites/production/files/2016-02/documents/fs 2005 6 15.pdf; see also EPA, Regulatory Impact Analysis for the Final Clean Air Visibility Rule for the Guidelines for Best Available Retrofit Technology (BART) Determinations Under the Regional Haze Regulations, https://www.epa.gov/sites/production/files/2016-02/documents/bart_ria_2005_6_15.pdf (attached as Exhibit F).

See Exhibit D. A comparable analysis concluded that controls on the Navajo Generating Station would yield \$14-35 million in public health benefits each year. See Exhibit E.

Given the significant emission reductions needed to make reasonable progress in the second planning period, the annual public health impacts of EPA's proposed delay will likely be significant. Consistent with its past practice in estimating the health benefits of various clean air rules, EPA can, and should, estimate the health impacts of its proposed three year deadline extension.

EPA should not only evaluate the public health impacts of its proposal as a matter of consistency, but it should also evaluate those impacts under Executive Order 12898, which directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission. EPA's proposed delay is likely to disproportionately impact children, communities of color, and the economically disadvantaged. Children are especially vulnerable to pollutants such as SO₂, NO_x, and particulate matter. Moreover, as EPA recognized in the Clean Power Plan, the communities that are closest in proximity to power plants include a higher percentage of communities of color and low-income communities than national averages. Power plants—especially, coal-fired power plants—are the largest sources of visibility impairing pollutants, and would therefore be subject to reasonable progress controls in the second planning period. Thus, it is reasonable to expect that a delay in implementing pollution reductions necessary under the next round of regional haze plans will adversely impact the low-income communities and communities of color near many of those power plants. Because EPA has already recognized that low-income communities and communities of color near power plants are disproportionately impacted by the negative health effects of power plant pollution, EPA must evaluate the impacts of another three-year delay in the reduction of harmful, visibility impairing pollution from these sources.

For all these reasons, EPA should withdraw its proposal to extend the deadline to 2021 for submitting haze SIPs for the second planning period. Instead, EPA should retain the deadline of July 31, 2018.

5. If EPA extends the deadline for regional haze SIP revisions, the agency should make clear that it may impose sanctions if states fail to submit timely and lawful SIP revisions.

If the deadline is extended to 2021, it is imperative that states submit timely, lawful plans, given the mandate to make reasonable progress and to meet the 2028 end date for the second planning period. In particular, it can take one or more years for EPA to process a SIP, and, where necessary, to issue a FIP, which would leave a limited amount of time for sources to install and implement controls before 2028. Provided there be no delay in SIP submissions in 2021 and EPA act promptly on each state's haze plan, 2028 is a workable compliance date. As discussed previously, *supra* Section II, the first planning period saw most states fail to submit plans on time and EPA take many years to process SIPs and issue FIPs where appropriate. Given EPA's proposal to shorten the second planning period, there simply will not be enough time for such delays to recur.

To ensure that plans are finalized and controls implemented before the end of the second planning period, EPA should indicate in the final rule that it will make immediate non-submittal findings for states that fail to submit timely, lawful plans, and will also find that the state plan is "substantially inadequate" to comply with requirements of the Act. 42 U.S.C. §§ 7410(k)(1),(5), 7509(a)(3). The Act authorizes EPA to require a state to revise its SIP within 18 months whenever the agency finds that the "applicable implementation plan for any area is substantially inadequate . . . to otherwise comply with any requirement of this chapter [i.e., the Clean Air Act, Chapter 85 of the United State Code]." 42 U.S.C. § 7410(k)(5) (emphasis added). Section 7509, in turn, provides that EPA may, after issuing a finding of substantial inadequacy under 42 U.S.C. § 7410(k)(5), impose sanctions on a "State that has failed to make any submission as may be required under this chapter [i.e., the Clean Air Act, Chapter 85 of the United State Code], or after "disapproving a submission" required under the Clean Air Act. 42 U.S.C. § 7509(a)(3). Further, a finding of nonsubmittal starts a two-year clock for EPA to promulgate a FIP. *Id.* § 7410(c)(1).

L. Tribal Consultation

We support EPA providing technical and financial assistance to Indian Tribes to enable them to effectively consult and otherwise participate in the development of regional haze plans, as recommended by the National Tribal Air Association ("NTAA") in their June 22, 2016 comments.

CONCLUSION

We appreciate the opportunity to comment on EPA's proposal. Please do not hesitate to contact us with any questions concerning our comments.

Sincerely,

Matthew Gerhart Earthiustice

633 17th St., Suite 1600

Denver, CO 80202

(303) 996-9612

mgerhart@earthjustice.org

Stephanie Kodish National Parks Conservation Association 706 Walnut Street, Suite 200 Knoxville, TN 37902 (865) 329-2424, ext. 28 skodish@npca.org Nathan Miller National Parks Conservation Association 738 N. Fifth Ave., Suite 222 Tucson, AZ 85705 (773) 230-582321 nmiller@npca.org

Joshua Smith Sierra Club 2101 Webster St., Suite 1300 Oakland, CA 94612 (415) 977-5560 joshua.smith@sierraclub.org

Jennifer L. Cassel Staff Attorney Environmental Law & Policy Center 35 E. Wacker Dr., Suite 1600 Chicago, IL 60601 (312) 795-3726 JCassel@elpc.org

Kathy Attar Physicians for Social Responsibility 1111 14th St, NW, Suite 700 Washington, DC, 20005 (202) 587-5224 kattar@psr.org

Mark Riskedahl Northwest Environmental Defense Center 10015 SW Terwilliger Boulevard Portland, OR 97219 (503) 768-6673 msr@nedc.org

Georgia Murray Appalachian Mountain Club 361 Route 16, P.O. Box 298 Gorham, NH 03581 gmurray@outdoors.org